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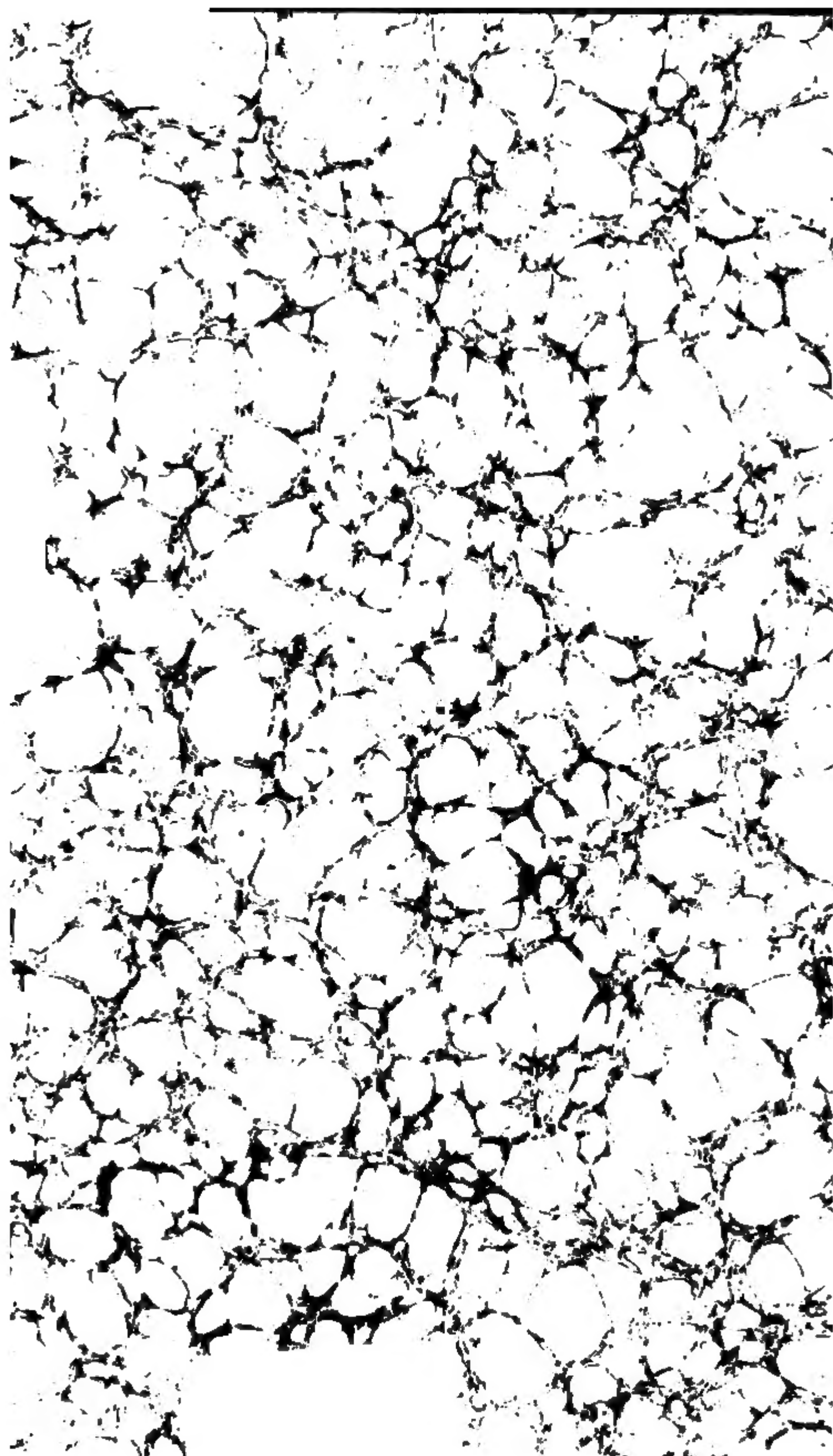
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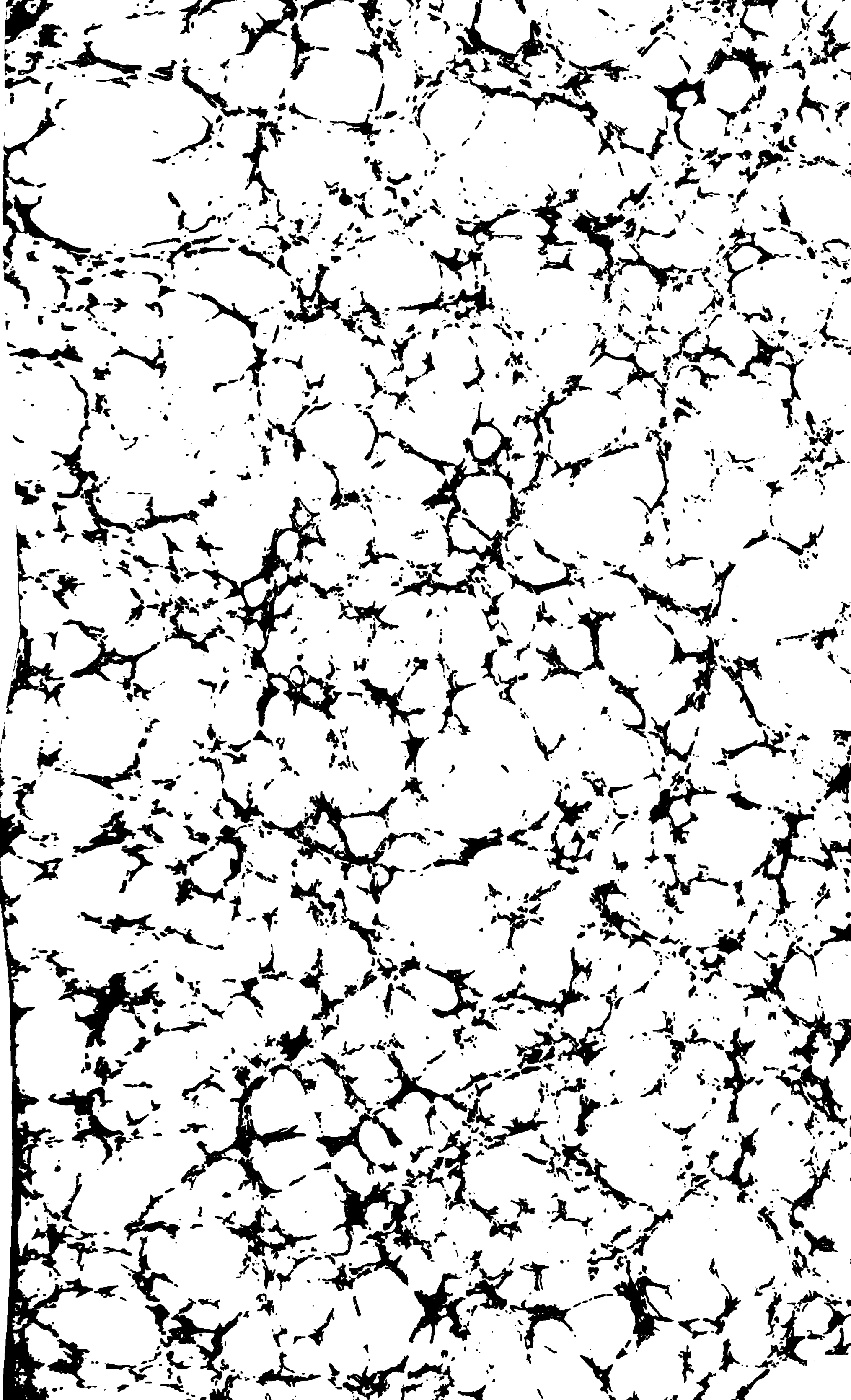
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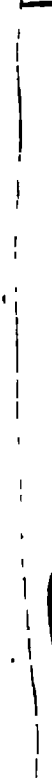
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WAR INDUSTRIES BOARD

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HISTORY OF PRICES DURING THE WAR

WESLEY C. MITCHELL, Editor in Chief

**GOVERNMENT
CONTROL OVER PRICES**

32

By

PAUL WILLARD GARRETT

assisted by

ISADOR LUBIN and STELLA STEWART

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CONTENTS.

Introduction.....	21
-------------------	----

BOOK I.

GOVERNMENT CONTROL OVER PRICES.

	Page.
PART I.—The problems that led the Government into price control.....	23
1. The rise in prices before the Government interfered.....	23
(1) The movement of prices from 1890 to the European war...	24
(2) The war-time prices to April 6, 1917.....	25
(3) The final upward swing which provoked Government control.....	29
2. The conditions that threatened further rises.....	29
(1) The European demands upon American production.....	30
(2) The breakdown in coal distribution.....	32
(3) The shortage of ships.....	33
3. The desire of the Government to make its own purchases at reasonable costs.....	35
4. The growing discontent with the rising prices of staples.....	35
5. The influence of British and French controls.....	35
PART II.—The administration of price controls during the war.....	37
1. The agencies delegated and the controls which they exercised.....	37
(1) The President made a minister of price controls.....	38
2. The Food Administration.....	40
(1) The food-control act.....	42
The purposes of the act.....	42
The license system.....	43
The teeth of the statute.....	45
The fixing of a minimum price for wheat.....	45
(2) The policies of the Food Administrator.....	46
No fixed prices established.....	48
The "reasonable-margin-of-profit" rule.....	49
The cost basis.....	51
Fixing maximum wholesale and retail margins.....	52
Disregard of replacement value.....	54
Agreements with the trade.....	55
Campaigns of education for consumers.....	56
(3) The administration of food control.....	57
The license system as the basis of control.....	57
Wheat, flour, and bread.....	59
The demands of Europe.....	59
The necessity for an increased world production.....	60
A minimum price for wheat fixed by statute.....	61
The relation of the minimum price to the market price.....	62
The enforcement of the wheat price.....	64
The licensing of millers and elevators.....	66
The 1919 guaranteed price.....	67

PART II.—The administration of price controls during the war—Contd.**2. The Food Administration—Continued.****(3) The administration of food control—Continued.**

Wheat flour and bread—Continued.	Page.
Producers generally satisfied.....	67
Stability of the wheat price a reality.....	68
Close relation of flour and wheat.....	68
Control exercised over flour.....	69
Control of flour in 1918.....	70
Conservation measures.....	71
Results of flour control.....	72
Exercising bread control.....	72
Results of bread control.....	73
Summary	74
Sugar.....	78
The beet-sugar control.....	79
Control over the cane-sugar supply.....	80
The distribution of refined sugar.....	81
The Sugar Equalization Board.....	82
The limitation of sugar consumption.....	84
Sugar by-products.....	85
The results of sugar control.....	86
Live stock and meats.....	87
The stimulation of meat production.....	88
Hog production.....	89
Beef production.....	93
The licensing of the meat industry.....	95
Licensees with annual sales exceeding \$100,000,000.....	96
Licensees with annual sales of less than \$100,000,000.....	97
The administration of the license system over meat.....	97
The results of meat control.....	99
Poultry and dairy products.....	101
Poultry.....	101
Eggs.....	102
Butter.....	103
Cheese.....	105
Milk.....	105
Oleomargarine	109
Cotton seed and cottonseed products.....	110
The early-price situation.....	110
The licensing of the industry.....	110
Control over the 1918 crop.....	112
The post-armistice situation.....	112
The effects of control.....	114
Canned and dried foods.....	115
Vegetables	115
Canned fish	117
Dried fruits	119
The results of control.....	120
Rice and rice flour.....	120
Control over the industry.....	121
The price agreement of the summer of 1918.....	121

PART II.—The administration of price controls during the war—Contd.

2. The Food Administration—Continued.

(3) The administration of food control—Continued.

	Page.
Coarse grains and feedstuffs.....	123
Human foods	123
The creation of the Grain Division.....	124
The limitation of coarse grain millers' prices.....	126
Feeding stuffs.....	127
Feeds other than coarse grains and their products..	127
Coffee	128
Governmental interference.....	128
The closing of the coffee exchange.....	130
Collateral commodities.....	130
Ammonia	130
Ice	131
Arsenic	132
Unlicensed control over commodities at retail.....	134
Indirect control through licensees.....	135
The organization of the retail trade.....	136
The consumers' reports.....	137
The "fair-price" lists.....	137
A comparison of retail prices.....	140
Retail prices in the United States and Canada....	144
Enforcement of the license control.....	145
The Enforcement Division	145
The licensee reports.....	146
The inspection work.....	147
The Federal food administration in the States....	147
The emphasis upon publicity.....	148
The centralization of Government and allied food purchases.....	148
Division of coordination of purchase.....	149
Food Purchase Board.....	150
3. The Fuel Administration.....	151
(1) The war-time rise in coal prices.....	151
(2) The coal-production committee.....	154
The 1,700,000-ton Navy order.....	155
The Peabody-Lane prices	155
Their repudiation by Secretary Baker.....	158
(3) The food and fuel act.....	160
The power to fix coal and coke prices.....	160
Enforcement provisions	161
(4) The kinds of fuel control.....	161
Organization	162
Control over distribution.....	162
Control over production.....	163
Control over conservation.....	165
(5) The control over coal prices.....	165
Price fixing of bituminous coal at the mine....	166
Prices fixed by the President Aug. 21, 1917.....	166
Modifications made by the Fuel Administrator..	167
A comparison of prewar and fixed prices.....	169

PART II.—The administration of price controls during the war—Contd.

3. The Fuel Administration—Continued.

(5) The control over coal prices—Continued.

Page.

Price fixing of anthracite coal at the mine.....	172
Prices fixed by the President.....	173
Modifications made by the Fuel Administrator..	174
A comparison of prewar and fixed prices.....	175
Control over the prices of coal middlemen.....	177
Jobbers' margins.....	177
Distributors' margins.....	178
Control over coal at retail.....	178
Special prices, premiums, and charges.....	179
Costs made the basis of price-fixing.....	179
Bituminous costs.....	182
Anthracite costs.....	184

(6) The control over coke.....	188
--------------------------------	-----

(7) The control over charcoal.....	190
------------------------------------	-----

(8) The control over fuel wood.....	190
-------------------------------------	-----

(9) The control over petroleum.....	191
-------------------------------------	-----

The early war situation.....	191
------------------------------	-----

The regulation of prices.....	191
-------------------------------	-----

The licensing of the petroleum industry.....	193
----------------------------------------------	-----

The gasoline emergency.....	194
-----------------------------	-----

Control and its effect upon prices.....	194
-----------------------------------------	-----

4. The War Industries Board.....	195
----------------------------------	-----

(1) The development of a control over war industries.....	195
-----------------------------------------------------------	-----

The early work of the Council of National Defense..	196
-----------------------------------------------------	-----

The General Munitions Board.....	197
----------------------------------	-----

The Committee on Supplies.....	200
--------------------------------	-----

The Committee on Raw Materials, Minerals, and Metals.....	201
-----------------------------------------------------------	-----

The War Industries Board created under the Council of National Defense on July 28, 1917.....	202
----------------------------------------------------------------------------------------------	-----

The appointment of Chairman Baruch.....	203
-----------------------------------------	-----

The War Industries Board made independent under the Overman Act on May 28, 1918.....	205
--------------------------------------------------------------------------------------	-----

(2) The powers and policies of the War Industries Board....	205
-------------------------------------------------------------	-----

Its basis in law.....	206
-----------------------	-----

The policy of Mr. Baruch.....	209
-------------------------------	-----

The organization of the board.....	210
------------------------------------	-----

The relation of the board to price-fixing.....	211
------------------------------------------------	-----

(3) The kinds of control exercised.....	212
-----------------------------------------	-----

Requirements.....	213
-------------------	-----

Clearances.....	215
-----------------	-----

The clearance committee.....	215
------------------------------	-----

The clearance office.....	216
---------------------------	-----

The clearance list.....	217
-------------------------	-----

Priorities.....	218
-----------------	-----

Authority for priority control.....	221
-------------------------------------	-----

The priority circulars.....	222
-----------------------------	-----

The method of rating.....	222
---------------------------	-----

Automatic rating.....	223
-----------------------	-----

PART II.—The administration of price controls during the war—Contd.

4. The War Industries Board—Continued.

(3) The kinds of control exercised—Continued.

Priorities—Continued.

Page.

Unifying priorities in production with those in delivery	225
Purposes demanding preferential treatment.....	225
The preference lists.....	226
War-industry controls center about priorities.....	228
Allocations	229
Curtailments.....	230
Conservation.....	230
Prices.....	232
5. The price-fixing committee.....	233
(1) Organization of the committee.....	233
(2) The basis of power to fix prices.....	235
The threats of requisitioning and commandeering.....	235
The war-time spirit.....	237
(3) Its sphere of activity.....	237
Committee concerned primarily with Government purchases.....	237
The committee fixed prices only upon request.....	238
Fixed producer prices.....	239
(4) The character of the price-fixing agreements.....	239
The method of making the agreements.....	239
All prices were maximum prices.....	240
Fixed prices applicable alike to low and high cost producers	240
Fixed prices applicable alike to Government, allied, and public purchases.....	241
(5) The price policies of the committee.....	242
(6) Administering committee decisions.....	244
(7) The commodities fixed in price by the War Industries Board and the price-fixing committee.....	244
Iron, steel, and their products.....	244
The runaway steel market in 1917.....	245
The disposition to control iron and steel prices....	247
The policy of the President and his war officials....	247
The Pomerene bill in Congress.....	249
The attitude of the iron and steel industry.....	250
Problems facing the Government in assuming control.....	251
Should control extend to civilian purchases....	251
Should control extend to allied purchases....	251
Flat rate or cost plus profit scale.....	252
Should higher contract prices already made be abrogated	253
Should the Government recognize the labor, fuel, and transportation problems.....	253
Should account be taken of the middlemen....	253
Raw-material prices fixed September 24, 1917....	254
Semi-finished products prices fixed October 11, 1917.....	264

PART II.—The administration of price controls during the war—Contd.**5. The price-fixing committee—Continued.****(7) The commodities fixed in price by the War Industries Board and the price-fixing committee—Continued.**

	Page.
Iron, steel, and their products—Continued.	
Finished product prices fixed November 5, 1917__	266
The determination of differentials upon basic prices -----	267
Modifications of original basic prices fixed-----	269
Price control and the relative rise of prices and production-----	270
Summary-----	271
Copper-----	272
Copper production of more concern than high prices -----	272
The early allied purchases-----	274
The allied purchase of 77,000,000 pounds-----	275
The early Government purchases-----	275
The Government purchase of 45,510,000 pounds in March, 1917-----	276
The Government purchase of 60,000,000 pounds in June, 1917-----	276
Electrolytic copper fixed on September 21, 1917__	278
The determination of the Government to fix the price at 22 cents-----	278
The copper interests ask for a price of 25 cents -----	278
The price fixed at 23½ cents-----	281
Interpretation of the fixed-price policies____	281
Appeal of small high-cost producers for an increase-----	283
Electrolytic copper increased to 26 cents on July 2, 1918-----	283
Summary-----	284
Aluminum-----	284
Lead-----	286
Zinc -----	288
Nickel -----	289
Quicksilver-----	291
Tin-----	291
Platinum-----	293
Cotton textiles -----	293
The early need for regulation-----	293
The price-fixing committee and the cotton industry--	297
The fixing of cotton-textile prices-----	298
Cotton-yarn prices-----	301
The proposed price revision-----	301
Summary-----	303
Cotton linters-----	304
Government control of the linter crop-----	306
The cotton-linter pool-----	306
The mattress-linter pool-----	308

PART II.—The administration of price controls during the war—Contd.

5. The price-fixing committee—Continued.

(7) The commodities fixed in price by the War Industries Board and the price-fixing committee—Continued.

	Page.
Wool.....	309
The approach to regulation.....	310
The adoption of a regulative policy.....	313
The effects of wool control.....	316
Hides, skins, and leather.....	318
Cattle hides.....	318
Sheepskins.....	320
Tanned leather.....	321
Summary.....	323
Manila fiber and hemp.....	324
Burlap.....	325
Lumber.....	326
Southern yellow pine.....	326
Other soft woods.....	329
Hardwoods.....	330
Building materials.....	331
Portland cement.....	334
Common brick.....	336
Hollow building tile.....	338
Gypsum wall board and plaster board.....	338
Sand, gravel and crushed stone.....	338
Chemicals.....	338
Nitrate of soda.....	338
Heavy acids.....	341
Sulphuric acid.....	341
Nitric acid.....	343
Conclusion.....	344
Sulphur and pyrites.....	344
Wood chemicals.....	345
Acetic acid.....	346
Methyl acetate.....	347
Formaldehyde.....	347
Toluol.....	348
Alkalis.....	349
6. The War Trade Board.....	350
(1) The creation of the War Trade Board.....	350
(2) All exports and imports brought under license control.....	351
The control over exports.....	351
The conservation list.....	352
The control over imports.....	352
The restricted list.....	352
(3) The exercise of price control by uses of the licensing power.....	353
Rubber.....	357
The British embargo of 1914.....	357
The licensing of rubber imports.....	358
The restriction of rubber imports and price fixing.....	358
The results of the embargo.....	359
Silk.....	360

PART II.—The administration of price controls during the war—Contd.	Page.
7. The War Department.....	361
(1) The Army represented on the price-fixing committee....	363
(2) The price-fixing section.....	364
(3) Commandeering and requisitioning	364
(4) The Board of Appraisers.....	365
8. The Navy Department.....	367
(1) Commodities purchased by the Navy.....	367
(2) Representation of the Navy upon the price-fixing com- mittee.....	371
(3) Commandeering.....	371
(4) The supply of raw materials to contractors by the Navy..	372
(5) Determination of "fair and just" prices.....	373
9. The Federal Trade Commission.....	374
10. The Department of Agriculture.....	376
(1) The control of farm equipment.....	376
(2) Fertilizers.....	379
11. The basis for determining a fixed price.....	380
(1) The objects of the price fixers.....	380
(2) The methods of control.....	381
(3) The data used in fixing a price.....	382
(4) The problem of the low-cost and the high-cost producers..	383
(5) Prices fixed above the "bulk line" of production.....	399
(6) The interpretation of a "reasonable profit".....	403
12. The lifting of Government control over prices.....	411
(1) The effect of lifting control upon prices.....	411
(2) The purpose of the Industrial Board.....	413
PART III.—Statistical devices for measuring the effects of price control..	415
Introduction	415
Table 1. Gradual extension of price control.....	416
Table 2. The Price Section weighted index number separated into controlled and uncontrolled prices.....	418
(1) Tables of index numbers of prices of controlled and uncontrolled commodities.....	419
(2) The series of the Price Section index number con- sidered uncontrolled.....	459
(3) The series of the Price Section index number con- sidered controlled.....	477
Table 3. Chain indexes of controlled and uncontrolled prices.....	491
Table 4. Relative points below which 50 basic commodities were pegged	504
A summary of actual and relative prices below which basic prices were fixed.....	514
Relative prices of 50 basic commodities.....	516
Table 5. A comparison of controlled raw material prices with the prices of their uncontrolled manufactured products.....	532
Table 6. A comparison of the prices of controlled manufactured goods with the prices of their uncontrolled raw materials.....	540
Table 7. A comparison of controlled raw material prices with the prices of their controlled manufactured products.....	542
Table 8. A comparison of controlled prices at wholesale and corre- sponding controlled prices at retail.....	550
Table 9. A comparison of war prices in the United States, England, France, and Canada.....	553

BOOK II.

GOVERNMENT REGULATIONS RELATING TO PRICES.

	Page.
1. Introduction.....	567
2. Foods.....	568
General regulations.....	576
Special regulations.....	578
Wheat millers and manufacturers of mixed flours.....	578
Operators of all places for the storage of, and dealers in, wheat, corn, oats, rye, and barley.....	585
Rice.....	588
Sugar.....	588
Canners of peas, tomatoes, corn, dried beans, salmon, sardines, and tuna; manufacturers of tomato catsup, tomato soup, and other tomato products; condensed, evaporated, or powdered milk.....	591
Packers of dried peaches, dried apples, dried prunes, or dried raisins.	595
Dealers and brokers in, and importers of, certain vegetable oils and their raw materials.....	597
Manufacturers of oleomargarine and other butter substitutes.....	599
Wholesalers, jobbers, importers, and retailers of licensed nonperish- able food commodities.....	599
Brokers and auctioneers of licensed nonperishable food commodities.	610
Dealers in sugars and sirups.....	611
Distributors of fresh fruits and vegetables.....	613
Distributors of fresh fish and frozen fish.....	614
Distributors of poultry.....	616
Distributors of eggs.....	619
Manufacturers and distributors of butter.....	625
Manufacturers and distributors of cheese.....	629
Cold storage warehousemen.....	634
Distributors of feeding stuffs.....	635
3. Fuels.....	640
Anthracite coal.....	642
Bituminous coal.....	643
Coke.....	657
Charcoal.....	661
Jobbers' margins and distributors' commissions.....	661
Retail prices.....	662
Petroleum.....	663
4. Metals and metal products.....	665
Aluminum.....	665
Copper.....	669
Iron and steel.....	670
Lead.....	673
Manganese ore.....	673
Nickel.....	675
Platinum metals.....	675
Quicksilver.....	675
Silver.....	676
Zinc.....	678
5. Textiles and fibers.....	680
Binder twine.....	680
Burlap.....	680
Cotton goods.....	681

5. Textiles and fibers—Continued.	Page.
Cotton linters.....	703
Rates for compressing cotton.....	704
Kapok.....	704
Manila fiber.....	705
Rags.....	706
Silk.....	708
Wool.....	709
6. Hides, skins, and leather.....	729
Hides and skins.....	732
Black harness leather.....	749
Sole and belting leather.....	750
7. Lumber.....	752
General regulations.....	752
Birch logs.....	755
Black walnut.....	755
Cypress and tupelo.....	756
Douglas fir.....	759
Mahogany lumber.....	768
New England spruce.....	768
North Carolina pine.....	773
Pennsylvania hemlock.....	778
Southern or yellow pine.....	781
Western spruce.....	790
Treenails.....	791
8. Building materials.....	792
Brick.....	792
Gypsum wall board and plaster board.....	793
Hollow building tile.....	793
Millwork.....	795
Portland cement.....	800
Sand, gravel, and crushed stone.....	801
9. Chemicals.....	803
Acids.....	804
Alkalis.....	805
Bleaching powder.....	805
Carbon tetrachloride.....	805
Caustic soda.....	805
Chlorine, liquid.....	805
Soda ash.....	805
Ammonia.....	805
Ammonium sulphate.....	808
Arsenic.....	808
Castor beans and castor oil.....	808
Glycerin.....	810
Nitrate of soda.....	810
Quebracho.....	810
Smokeless cannon powder.....	811
Sulphur.....	811
Toluol.....	811
Wood chemicals.....	812
Wool grease.....	812
10. Rubber.....	812
11. Paper, news-print.....	815

APPENDIX.

Bibliography -----	Page. 821
	13

LIST OF CHARTS.

	Page.
1. Weighted index numbers of prices of "all commodities," by months, January, 1913, to the time that control began. Average price July, 1913-June, 1914=100-----	25
2. Weighted index numbers of prices of food group, by months, January, 1913, to the time that control began-----	28
3. Weighted index numbers of prices of fuels group, by months, January, 1913, to the time that control began-----	28
4. Weighted index numbers of prices of metals group, by months, January, 1913, to the time that control began-----	28
5. Allied and neutral sea-going tonnage lost and built, by months, January, 1917-September, 1918-----	34
6. Relative prices of wheat, No. 2 red winter, cash at Chicago, by months, January, 1913-December, 1918-----	75
7. Relative prices of flour, wheat, standard patents, at Minneapolis, by months, January, 1913-December, 1918-----	75
8. Relative prices of bread, loaf, bakery to retail grocer, by months, January, 1913-December, 1918-----	75
9. Relative prices of sugar in the United States, England, and France, by months, January, 1913-December, 1918-----	86
10. Relative prices of cotton seed; lard substitute; and cottonseed oil, crude, by months, January, 1913-December, 1918-----	114
11. Relative prices of canned sardines, oil, keyless (100 $\frac{1}{4}$ -inch case); and canned salmon, pink, tall, 1 dozen No. 1 cans, by months, January, 1913-December, 1918-----	118
12. Relative prices of rice, Japan head; rice, Honduras head; and puffed rice, Quaker; by months, January, 1913-December, 1918-----	120
13. Weighted index numbers of prices of corn and corn products; and "all commodities," by months January, 1913-December, 1918-----	125
14. Weighted index numbers of prices of oats, rice, buckwheat, and their products; and "all commodities," by months, January, 1913-December, 1918-----	125
15. Weighted index numbers of prices of hops, rye, barley, and their products; and "all commodities," by months, January, 1913-December, 1918-----	125
16. Relative prices of petroleum, 5 fields; fuel oil, 5 cities; and gasoline, 5 cities, by months, January, 1913-December, 1918-----	
17. Weighted index numbers of iron, steel, and their products; and "all commodities," by months, January, 1913-December, 1918-----	247
18. Relative prices of copper, electrolytic, at New York, by months, January, 1913-December, 1918-----	274
19. Relative prices of short staple cotton, upland middling; short staple cotton yarns, 5 series; and short staple cotton manufacture, 19 series; by months, January, 1913-December, 1918-----	304
20. Relative prices of cotton linters, grade D, cut 130-175 pounds per ton, by months, January, 1913-December, 1918-----	309

	Page.
21. Relative prices of raw wool, domestic and imported, by months, January, 1913-December, 1918.....	311
22. Weighted index numbers of prices of hides, skins, leather, and leather manufactures; and "all commodities," by months, January, 1913-December, 1918.....	317
23. Weighted index numbers of prices of lumber; and "all commodities," by months, January, 1913-December, 1918.....	326
24. Weighted index numbers of prices of fertilizers; and "all commodities," by months, January, 1913-December, 1918.....	378
25. Costs at which different portions of the output of beehive coke were produced in September, 1918.....	400
26. Costs at which different portions of the output of pig iron, basic, were produced in September, 1918.....	401
27. Costs at which different portions of the output of Douglas fir were produced in March, April, and October, 1918.....	402
28. Costs at which different portions of the output of beet sugar were produced in 1917-18.....	402
29. Average adjusted costs, bulk lines, and prices originally fixed for all bituminous coal districts charted during August and September, 1917.....	403
30. The average reported costs and adjusted costs of the production of anthracite coal in the Pennsylvania anthracite region during the period December, 1917-May, 1918.....	403
31. The Bureau of Labor Statistics index number of "all commodities," separated into controlled and uncontrolled, by months, August, 1917-May, 1919. Average price for 1913=100.....	411
32. Weighted index numbers of prices of "all commodities" (1,866 series) controlled and uncontrolled during the war, by months, January, 1913-December, 1918.....	421
33. Weighted index numbers of prices of food group (268 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918.....	421
34. Weighted index numbers of prices of clothing group (409 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918.....	421
35. Weighted index numbers of prices of rubber, paper, and fiber group (119 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918.....	422
36. Weighted index numbers of prices of metals group (116 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918.....	422
37. Weighted index numbers of prices of fuels group (63 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918.....	422
38. Weighted index numbers of prices of building materials group (149 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918.....	423
39. Weighted index numbers of prices of chemicals group (243 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918.....	423
40. Weighted index numbers of prices of cotton and cotton products class (81 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918.....	423

	Page.
41. Weighted index numbers of prices of wool and wool products class (66 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918-----	424
42. Weighted index numbers of prices of hides, skins, leather, and leather manufactures class (156 series), controlled and uncontrolled during the war by months, January, 1913-December, 1918-----	424
43. Weighted index numbers of prices of rubber and rubber products class (34 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918-----	424
44. Weighted index numbers of prices of iron, steel, and their products class (88 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918-----	425
45. Weighted index numbers of prices of petroleum and petroleum products class (27 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918-----	425
46. Weighted index numbers of prices of lumber class (62 series), controlled and uncontrolled during the war, by months, January, 1913-December, 1918-----	425
47. Weighted chain index for prices of "all commodities" (1,366 series), controlled and uncontrolled during the war, by months, April, 1917-December, 1918-----	492
48. Weighted chain index for prices of food group (268 series), controlled and uncontrolled during the war, by months, April, 1917-December, 1918-----	495
49. Weighted chain index for prices of clothing group (409 series,) controlled and uncontrolled during the war, by months, April, 1917-December, 1918-----	495
50. Weighted chain index for prices of metals group (116 series), controlled and uncontrolled during the war, by months, April, 1917-December, 1918-----	496
51. Weighted chain index for prices for fuels group (63 series), controlled and uncontrolled during the war, by months, April, 1917-December, 1918-----	496
52. Weighted chain index for prices of building materials group (149 series), controlled and uncontrolled during the war, by months, April, 1917-December, 1918-----	497
53. Weighted chain index for prices of wheat and wheat products class (12 series), controlled and uncontrolled during the war, by months, April, 1917-December, 1918-----	497
54. Weighted chain index for prices of cotton and cotton products class (81 series), controlled and uncontrolled during the war, by months, April, 1917-December, 1918-----	498
55. Weighted chain index for prices of wool and woolen products class (66 series), controlled and uncontrolled during the war, by months, April, 1917-December, 1918-----	498
56. Weighted chain index for prices of iron, steel, and their products class (88 series), controlled and uncontrolled during the war, by months, April, 1917-December, 1918-----	499
57. Weighted chain index for prices of coal and coke class (27 series), controlled and uncontrolled during the war, by months, April, 1917-December, 1918-----	499
58. Relative prices of sugar, raw, 96° centrifugal, net cash, by months, January, 1913-December, 1918-----	507

	Page.
59. Relative prices of wheat No. 1 Northern spring, cash, by months, January, 1913–December, 1918.....	507
60. Relative prices of cattle hides, packers' heavy native steers, by months, January, 1913–December, 1918.....	507
61. Relative prices of cotton weaving yarns carded, white, northern, mule spun, 22/1 cones, by months, January, 1913–December, 1918..	508
62. Relative prices of print cloth, 27-inch, 64 by 60, 7.60 yards, by months, January, 1913–December, 1918.....	508
63. Relative prices of wool, Ohio, Pennsylvania, and West Virginia, unwashed, fine delaine, by months, January, 1913–December, 1918....	508
64. Relative prices of rubber, crude plantation, Hevea, first latex crêpe, by months, January, 1913–December, 1918.....	509
65. Relative prices of copper, electrolytic, at New York, by months, January, 1913–December, 1918.....	509
66. Relative prices of iron ore, Mesabi, nonbessemer, 51½ per cent, by months, January, 1913–December, 1918.....	509
67. Relative prices of pig iron, basic, by months, January, 1913–December, 1918.....	510
68. Relative prices of steel plates, tank, by months, January, 1913–December, 1918.....	510
69. Relative prices of anthracite coal, chestnut, by months, January, 1913–December, 1918.....	511
70. Relative prices of bituminous coal, by months, January, 1913–December, 1918.....	511
71. Relative prices of Connellsville coke, by months, January, 1913–December, 1918.....	512
72. Relative prices of crude petroleum, mid-continent, by months, January, 1913–December, 1918.....	512
73. Relative prices of Douglas fir, by months, January, 1913–December, 1918.....	513
74. Relative prices of yellow pine, Southern, common boards, No. 1, S-2-S, 1 by 10 inches, by months, January, 1913–December, 1918..	513
75. Relative prices of sulphuric acid, 60°, by months, January, 1913–December, 1918.....	513
76. Relative prices of copper, electrolytic, and copper wire, by months, January, 1913–December, 1918.....	533
77. Relative prices of pig iron, chains, and saws, by months, January, 1913–December, 1918.....	533
78. Relative prices of lead and lead pipe, by months, January, 1913–December, 1918.....	533
79. Relative prices of wool, woolen yarns, and woolen suitings, by months, January, 1913–December, 1918.....	534
80. Relative prices of crude rubber and rubber tires, by months, January, 1913–December, 1918.....	534
81. Relative prices of calf-skin leather, and shoes, by months, January, 1913–December, 1918.....	534
82. Relative prices of cotton yarn and raw cotton, by months, January, 1913–December, 1918.....	543
83. Relative prices of wheat, wheat flour, and bread, by months, January, 1913–December, 1918.....	543
84. Relative prices of iron ore, pig iron, and iron pipe, by months, January, 1913–December, 1918.....	544

	Page.
85. Relative prices of coal and coke, by months, January, 1913–December, 1918.....	544
86. Relative prices of cattle hides and sole leather, by months, January, 1913–December, 1918.....	545
87. Relative prices of sugar, raw and refined, by months, January, 1913–December, 1918.....	545
88. Medians of relative prices of 150 commodities in the United States and England, by months, January, 1913–December, 1918.....	557
89. Medians of relative prices of 34 food commodities in the United States and England, by months, January, 1913–December, 1918.....	557
90. Medians of relative prices of 29 clothing commodities in the United States and England, by months, January, 1913–December, 1918.....	558
91. Medians of relative prices of 9 iron and steel commodities in the United States and England, by months, January, 1913–December, 1918.....	558
92. Medians of relative prices of 55 chemical commodities in the United States and England, by months, January, 1913–December, 1918.....	559
93. Medians of relative prices of 44 commodities in the United States and France, by months, January, 1913–December, 1918.....	559
94. Index numbers of wholesale prices in the United States and Canada, by months, January, 1913–December, 1918.....	559

INTRODUCTION.

The uppermost aims of this inquiry have been to present an analysis and a documentary record of all price regulation exercised by the Government during the World War. The latter task, which had to be performed as a basis for the former, was made peculiarly difficult by the prompt departure of commodity chiefs from Washington after the armistice, and by the chaos of abandoned war files. This monograph covers all price regulations of which record was found, but other informal controls were agreed upon by word of mouth of which no written record remains.

All data of descriptive or analytical character appear in Book I, and all regulations pure and simple in Book II. Book I is separated into three parts to show the problems that led the Government into price control, the administration of price control during the war, and various statistical devices for measuring the effects of control. A full analysis of the methods, powers, and policies of each price-control board is given as general background to the specific commodity controls. The individual controls are then each discussed in detail under the board having jurisdiction over them at the time of the armistice. Book II is separated into ten parts, and is a documentary record strictly of all known Government regulations relating to food; fuel; metal and metal product; textile and fiber; hide, skin, and leather; lumber; building material; chemical; rubber and paper prices.

This study represents a cooperative effort of the statistical divisions of the War Trade Board and the War Industries Board, under Edwin F. Gay. It is Bulletin No. 3 of a series of 57 bulletins which make up a "History of prices during the war," edited by Wesley C. Mitchell. The others of these bulletins, which are listed on the last page, are records of monthly price fluctuations from January, 1913, through December, 1918. They afford indispensable bases for further inquiries into the price-control problem. Every precaution has been taken here to enhance their value to that end, by keeping all charts in scale with theirs and by following similar forms.

Many more persons have given aid, directly or indirectly, in gathering materials than can be named. But especial indebtedness for data on wheat, flour, and bread is owing to Lloyd W. Maxwell;

on building materials to Homer Hoyt; on hides, skins, and leather, to E. A. James; and on wool to Katherine Snodgrass. The manuscript pertaining to the Food Administration was read in full, and approved as to the accuracy of facts, by Raymond Pearl and W. C. Mullendore; the Fuel Administration, by C. E. Leshner; the War Industries Board, by Leo Wolman; and the War Trade Board, by Henry F. Waldradt. Particular sections were checked in addition by persons having technical knowledge of their contents. All manuscript and proof has been read and materially strengthened by Leo Wolman and Wesley C. Mitchell.

The staff, who assisted immediately in the preparation and collation of materials, was Mr. Isadore Lubin, Miss Stella Stewart, Miss Susie Anderson, and Miss Elsie Ray. Mr. Lubin is responsible for the sections on sugar, live stock and meats, poultry and dairy products, oleomargarine, cottonseed and cotton-seed products, canned and dried foods, rice and rice flour, coarse grains and foodstuffs, coffee, ammonia, ice, arsenic, petroleum, aluminium, lead, zinc, nickel, quicksilver, tin, platinum, cotton textiles, cotton linters, manila fiber and hemp, burlap, chemicals, rubber, silk, and fertilizers. Miss Stewart assisted in gathering materials and in the compilation of regulation schedules which appear in Book II. Miss Anderson had charge of the computations. Miss Ray attended to the clerical work.

P. W. G.

BOOK I

GOVERNMENT CONTROL OVER PRICES

PART I.

THE PROBLEMS THAT LED THE GOVERNMENT INTO PRICE CONTROL.

I. THE RISE IN PRICES BEFORE THE GOVERNMENT INTERFERED.

The future student of American prices will turn back to the 14 months from August, 1917, to the signing of the armistice, and mark them as the period of our initial great experience with Government price control. The Government laid no resolute hand upon prices even during the Civil War, although at that time staple quotations more than doubled.¹ Nor did the Government seek to arrest the phenomenal rises during 1916 and 1917, provoked by European war buying, until this country itself entered the war. The circumstances attending this first and extraordinary experiment in the regulation of prices possess peculiar interest.

The factors that dictated to the Government the necessity of regulating prices were the high level to which prices had climbed by the late summer of 1917 and the fear of a further rise. The precontrol

¹ The Price Section of the War Industries Board in its "Comparison of Prices During the Civil War and Present War" has made the following medians of relative prices of commodities at wholesale. They show relatively how high Civil War and present war prices went above their respective prewar levels, represented by 100.

	All commodities.		Foods.		Building materials.		Chemicals.		Cotton.		Copper, ingot.	
	Civil War.	Present war.	Civil War.	Present war.	Civil War.	Present war.	Civil War.	Present war.	Civil War.	Present war.	Civil War.	Present war.
Number of commodities...	92	92	36	36	19	19	15	15	2	2	1	1
1860 and 1913:												
January.....	100	100	100	100	100	100	100	100	101	98	100	117
April.....	100	100	100	100	100	100	100	100	101	95	98	101
July.....	100	100	98	100	100	100	100	100	98	95	89	97
October.....	100	100	99	100	100	100	100	100	99	106	90	110
1861 and 1914:												
January.....	100	100	98	100	100	100	100	100	112	98	81	99
April.....	98	100	94	100	100	100	100	100	117	101	81	96
July.....	96	100	88	100	100	100	100	100	136	101	77	89
October.....	97	100	91	105	102	100	100	100	197	53	87	78
1862 and 1915:												
January.....	100	100	99	107	106	100	117	100	336	62	113	87
April.....	100	100	96	105	112	100	107	100	253	76	94	106
July.....	100	102	93	105	107	100	109	115	346	69	98	132
October.....	111	102	100	102	116	100	125	126	515	94	119	120
1863 and 1916:												
January.....	125	114	116	110	133	104	130	138	618	94	132	152
April.....	137	115	125	113	143	109	142	187	668	92	130	179
July.....	134	119	117	117	139	110	142	187	631	100	130	177
October.....	135	130	125	127	145	117	133	156	773	135	138	190
1864 and 1917:												
January.....	156	142	152	142	160	124	153	152	741	134	161	197
April.....	169	157	161	162	177	137	161	175	695	152	172	227
July.....	194	169	184	169	189	152	189	177	1,410	196	198	212
October.....	200	174	194	193	200	152	200	196	1,101	209	200	157
1865 and 1918:												
January.....	216	178	232	188	200	161	222	192	1,096	243	209	157
April.....	190	182	189	199	196	172	182	197	343	250	145	157
July.....	158	187	156	194	171	181	153	193	430	232	121	170
October.....	175	.....	170	.....	200	.....	170	.....	426	.....	138	.....

risers of commodity prices at wholesale may be divided into three periods—the prewar advance from 1890 to the outbreak of the European war, the war-time rises to April 6, 1917, and the final upward swing of prices that was under way when the Government interfered.

(1) THE MOVEMENT OF PRICES FROM 1890 TO THE EUROPEAN WAR.

The fluctuations in prices for the quarter century prior to the outbreak of war in Europe on July 28, 1914, bore upon price control only as they established rather definite courses of price movement by departure from which war prices gave alarm. The most reliable measure of the price level for that period is the index number made by the Bureau of Labor Statistics for all commodities and those for important groups.¹

¹ The Bureau of Labor Statistics index number, separated to show prices within nine distinct groups (Farm products; Food, etc.; Cloths and clothing; Fuel and lighting; Metals and metal products; Lumber and building materials; Chemicals and drugs; House-furnishing goods; and Miscellaneous), contains quotations for representative commodities, varying in number from 192 in 1890 to 297 in 1914. These actual prices, in order that each might have its proper influence upon the final index number, were made into weighted aggregates and then turned into relatives by allowing each average prewar aggregate for 1913 to equal 100. The index numbers for "all commodities" and the nine groups from 1890 to the outbreak of war in Europe, and for later reference on through 1918, follow:

Bureau of Labor Statistics index number of prewar prices.

[1913=100.]

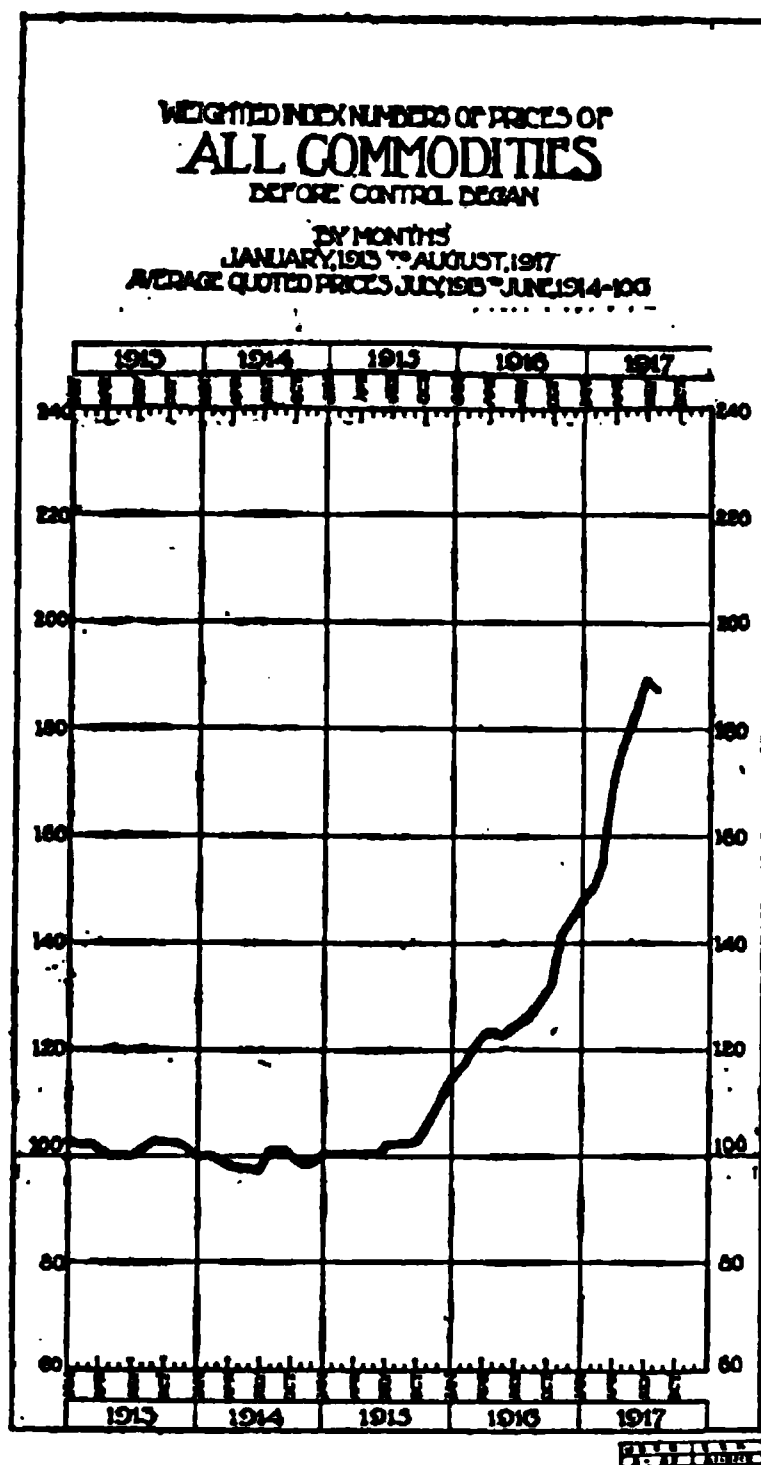
Year.	All commodities.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Lumber and building materials.	Chemicals and drugs.	House-furnishing goods.	Miscellaneous.
1890.....	81	68	89	92	69	114	72	90	119	92
1891.....	81	73	89	89	68	102	70	92	119	92
1892.....	76	66	80	89	65	93	67	91	116	88
1893.....	77	67	87	88	65	85	68	90	116	91
1894.....	69	59	77	78	61	72	66	83	115	86
1895.....	70	60	74	78	68	77	64	88	109	82
1896.....	66	54	67	75	68	80	63	91	106	80
1897.....	67	58	71	75	61	71	62	89	99	80
1898.....	69	61	76	79	61	71	65	92	105	79
1899.....	74	62	75	82	71	108	71	96	104	82
1900.....	80	69	79	88	81	106	76	97	111	91
1901.....	79	73	80	82	78	98	73	98	123	90
1902.....	85	81	85	84	93	97	77	97	123	92
1903.....	85	75	82	88	106	96	80	96	122	94
1904.....	86	80	87	89	91	88	80	97	117	94
1905.....	86	77	87	91	87	98	85	96	109	95
1906.....	88	78	84	97	90	113	94	94	109	97
1907.....	94	85	89	104	93	120	97	96	109	101
1908.....	91	85	94	94	90	94	92	100	104	97
1909.....	97	97	99	98	88	92	97	101	105	106
1910.....	99	103	100	99	83	93	101	102	104	116
1911.....	95	93	99	96	81	89	101	103	99	104
1912.....	101	101	108	98	89	99	100	101	99	101
1913.....	100	100	100	100	100	100	100	100	100	100
1914.....	99	103	103	98	92	87	97	103	103	97
1915.....	100	105	104	100	87	97	94	113	101	98
1916.....	123	122	126	127	115	148	101	143	110	121
1917.....	175	188	177	181	169	208	124	185	155	154
1918.....	196	218	189	236	175	182	151	206	207	195

This index of prewar prices, when compared with those of war-time prices, shows relatively a sober behavior. The greatest variation of the index number for "all commodities" during any year from its preceding year, was the drop of 10 per cent in 1894. The greatest subsequent yearly variation was the rise of 8 per cent which came in 1900 and again in 1902. The average of all yearly variations up or down between 1890 and 1914 was less than 5 per cent, though most of the changes were increases. The fluctuations within the groups—farm products, fuel and lighting, and metals and metal products—were somewhat more violent than these summary data show. The metal index, indeed, shows that metals jumped from 48 in 1898 to 73 in 1899, representing an increase of 52 per cent. There had, of course, been extraordinary rises in prices during peace times, but they were all presently to be surpassed.

(a) THE WAR-TIME PRICES TO
APRIL 6, 1917.

The outbreak of the war in Europe marked sharply a new period in the history of world prices, though the immediacy with which different American prices responded was curiously varied. The disturbance in European prices was communicated to certain American markets by August, 1914. But prices, as a whole, in this country held close to their prewar level for a full year after the war began. The "all commodities" index number of the Bureau of Labor Statistics, measuring roughly the variations in the general price level, ran 82, 81, 80, 81, for 1912 and the three years following. Indeed, not during any three successive years since 1890 had prices been so nearly steady as in 1913, 1914, and 1915.

The index number of 1,366 commodities at wholesale made by the Price Section of the War Industries Board, which is the best measure of American war prices pure and simple, shows that the relative stability of the general price level was the net resultant of numerous



Weighted index numbers.—"All commodities" before control began.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

price changes in opposite directions.¹ The prices of chemicals, as might be expected, started climbing after Europe had been at war but a month and did not turn back until a year and one-half later, when they had doubled. Metals, too, began soaring after Europe had been fighting only six months, and carried quotations on a runaway market toward levels unknown before. On the other hand, fuel prices continued falling for a full year after the war had begun, as did rubber, paper, and fiber prices generally. But the prices of food, clothing, building materials, and, indeed, the general price level, as shown graphically in the "all commodities" index number, remained stubbornly unresponsive to war stimuli until the autumn of 1915.

The Governments of England, France, and Russia, however, had been placing enormous contracts for war materials in the United States, and these purchases finally set American prices rising. When

¹ For measuring the price changes during the war period strictly, or indeed from January, 1913, to December, 1918, there is distinct advantage in shifting from the Bureau of Labor Statistics' index number to that made by the Price Section of the War Industries Board under the direction of Wesley C. Mitchell. This latter index number, made in a somewhat similar manner, contains prices for 1,386 representative commodities by months, quarters, and years for the six-year period. It, moreover, is divided into seven index numbers for the food, clothing, rubber, paper, fiber, metals, fuels, building materials, and chemical groups, which in turn are separated into 50 index numbers for important industrial classes. The actual monthly quotations for each commodity were multiplied by the 1917 production plus imports, the products were then cast up separately for each of the 72 months covered, and finally the aggregates were turned into relatives by taking the average aggregate from July 1, 1913, to June 30, 1914, as equal to 100. For further details, see War Industries Board Price Bulletin No. 1.

The Price Section index number for "all commodities" and those for the seven main groups, from January, 1913, to December, 1918, follow:

Price section index number of war prices, 1913-1918.

[Base, average prices July, 1913, to June, 1914=100.]

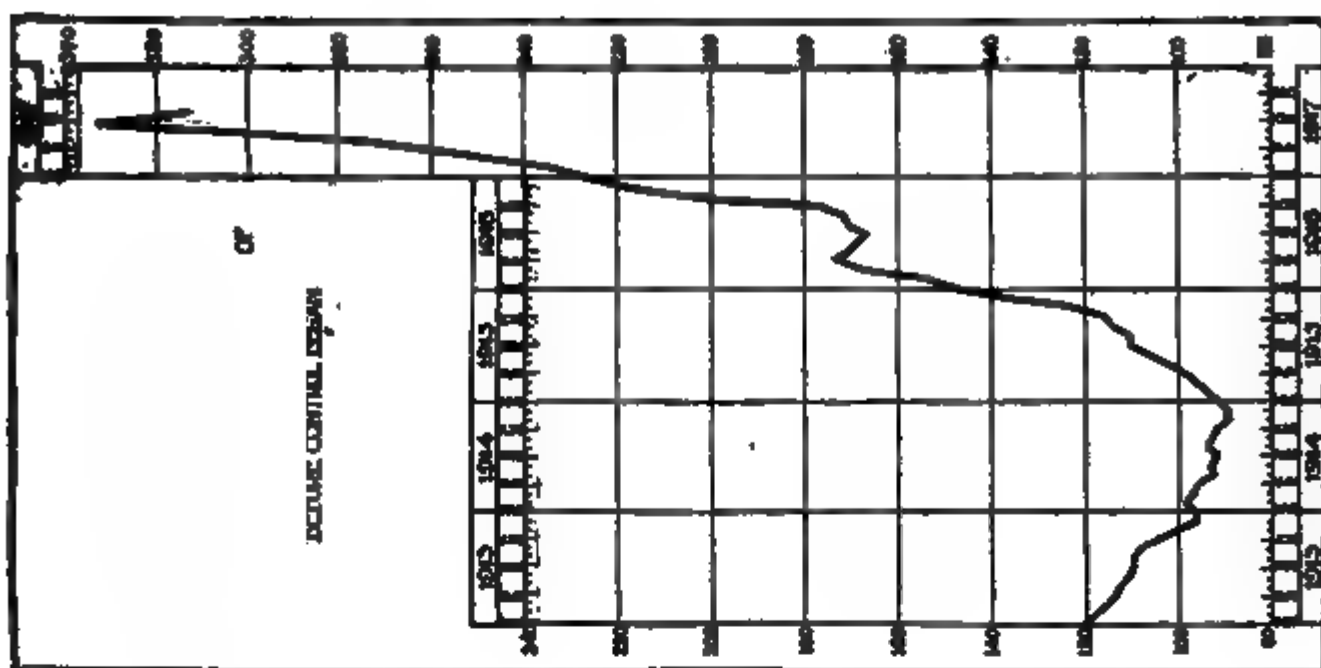
Series of quotations.	All commodities.	Food group.	Clothing group.	Rubber, paper, and fibers group.	Metals group.	Fuels group.	Building materials group.	Chemicals group.
1913.								
January.....	103	98	102	114	120	102	104	103
February.....	102	96	102	113	118	101	104	104
March.....	102	97	101	112	116	101	105	104
April.....	101	97	100	107	114	101	105	103
May.....	100	95	100	105	113	101	105	103
June.....	100	96	99	105	111	101	105	102
July.....	100	96	99	104	110	101	102	102
August.....	101	100	100	104	110	102	102	101
September.....	102	102	100	103	108	102	103	101
October.....	102	102	103	102	105	102	100	100
November.....	102	103	102	101	100	102	100	100
December.....	101	102	100	99	96	101	100	101
Year.....	101	99	101	106	110	101	103	102
1914.								
January.....	100	101	99	98	96	101	99	99
February.....	100	101	99	98	98	100	99	99
March.....	99	100	100	98	97	100	99	100
April.....	98	98	99	99	96	98	99	99
May.....	97	98	99	98	92	96	98	98
June.....	97	97	100	97	93	95	98	99
July.....	97	98	100	96	91	94	98	98
August.....	101	105	99	101	94	94	98	99
September.....	101	107	94	100	93	92	98	100
October.....	99	104	91	98	91	91	96	105
November.....	98	103	88	98	89	91	95	106
December.....	98	104	89	100	89	91	94	105
Year.....	99	101	96	98	93	95	98	101

the rise did begin on this side of the Atlantic it was extraordinarily rapid and often erratic. The whole price level, in point of fact, started upward late in 1915 at a pace not known since Civil War days.

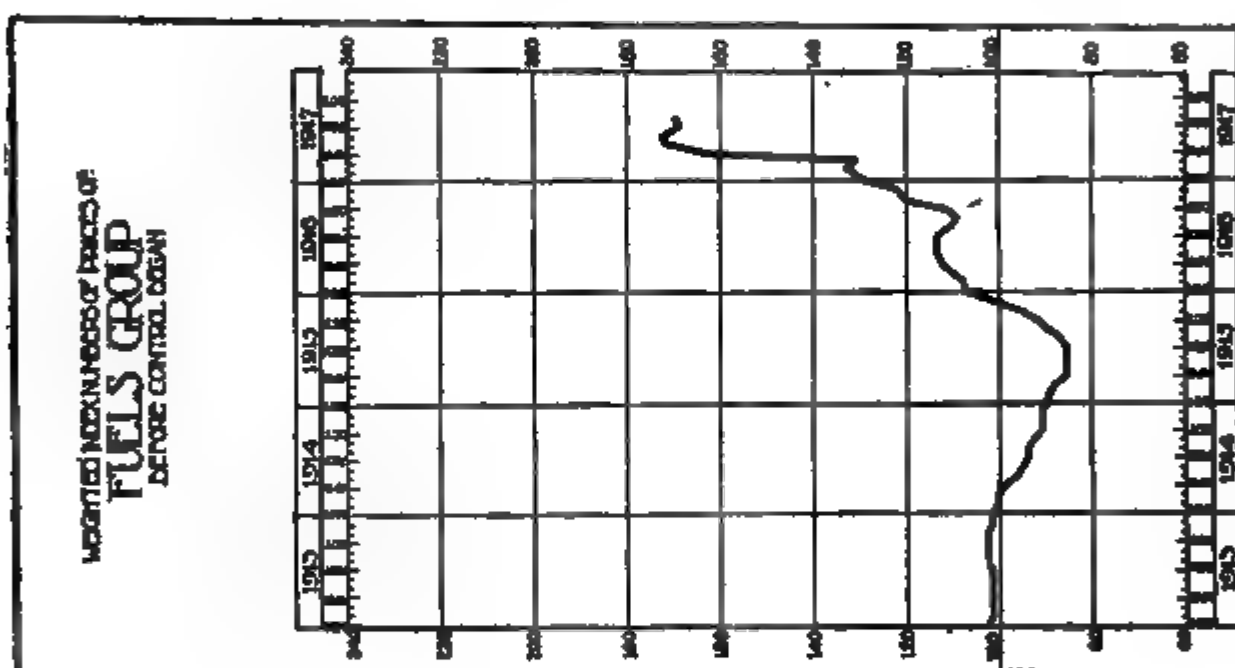
Price section index number of war prices, 1913-1918.—Continued.

[Base, average prices July, 1913, to June, 1914=100.]

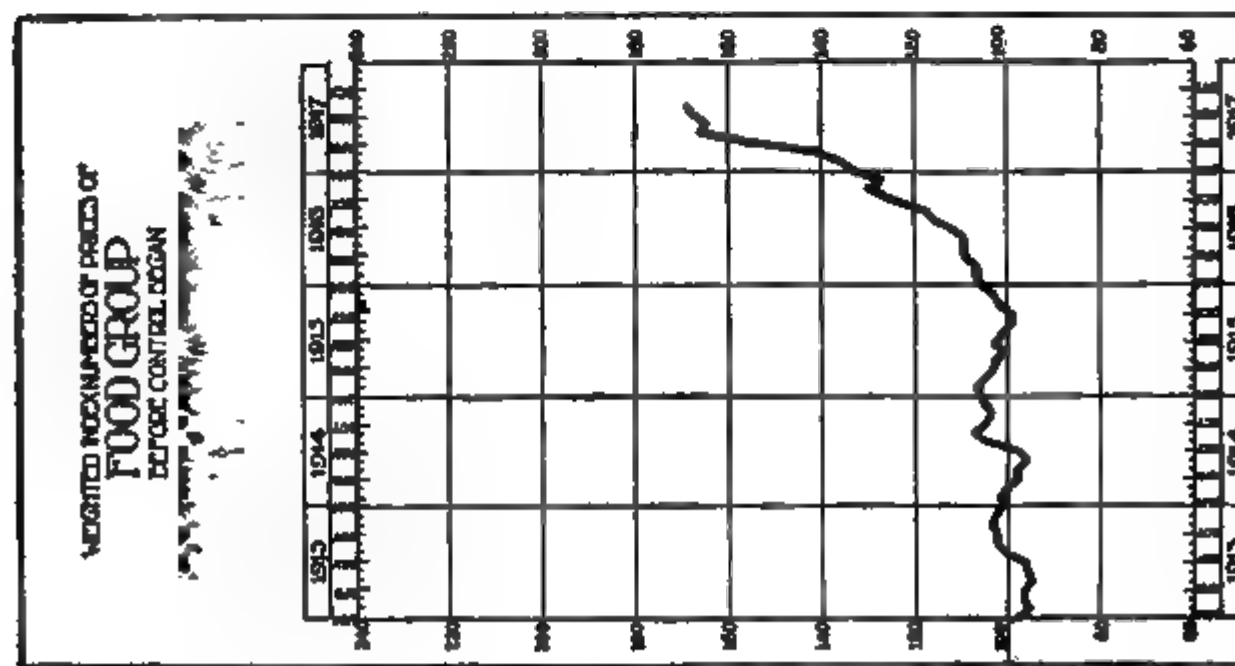
Series of quotations.	All commodities.	Food group.	Clothing group.	Rubber, paper, and fibers group.	Metals group.	Fuels group.	Building materials group.	Chemicals group.
1915.								
January.....	100	105	90	100	91	90	93	123
February.....	100	106	92	90	93	89	93	126
March.....	100	105	92	90	95	88	93	126
April.....	100	103	93	90	98	85	93	133
May.....	100	103	95	90	101	85	94	132
June.....	100	100	95	90	106	85	94	137
July.....	102	103	96	91	110	85	96	146
August.....	102	101	96	90	110	86	95	148
September.....	102	99	98	89	114	90	95	155
October.....	104	99	103	90	116	92	101	162
November.....	107	102	106	92	124	95	101	172
December.....	111	103	107	95	136	100	102	178
Year.....	102	102	97	91	108	89	96	145
1916.								
January.....	115	105	110	103	147	106	109	189
February.....	118	106	113	104	154	107	111	200
March.....	121	106	115	109	168	109	112	200
April.....	123	109	116	112	174	112	113	198
May.....	123	109	118	112	171	113	113	188
June.....	122	109	120	111	169	113	113	185
July.....	123	111	122	112	167	113	112	175
August.....	125	115	125	114	170	110	112	166
September.....	127	118	129	117	172	109	112	162
October.....	132	125	135	120	176	111	116	162
November.....	141	130	136	123	202	120	118	163
December.....	144	129	154	129	218	122	119	162
Year.....	126	118	125	114	174	112	114	179
1917.								
January.....	148	133	155	138	226	129	129	159
February.....	151	136	156	141	234	133	130	157
March.....	156	142	157	143	247	131	132	159
April.....	170	157	163	146	260	163	146	163
May.....	178	166	167	148	276	172	148	172
June.....	183	164	174	147	315	173	151	174
July.....	189	167	187	144	333	168	155	180
August.....	187	168	189	143	313	169	155	183
September.....	186	173	189	149	283	165	156	190
October.....	182	177	191	147	228	164	157	193
November.....	183	182	199	146	209	167	159	191
December.....	182	178	202	145	208	170	159	193
Year.....	175	162	177	145	262	158	148	176
1918.								
January.....	185	182	209	148	208	173	165	186
February.....	187	184	212	148	209	174	165	192
March.....	188	182	218	150	209	175	169	192
April.....	191	180	228	155	208	200	176	192
May.....	190	177	226	162	209	204	179	190
June.....	189	175	228	165	210	202	181	189
July.....	193	182	233	164	212	201	182	184
August.....	196	187	234	166	214	202	184	186
September.....	201	194	237	166	214	204	186	188
October.....	201	195	238	165	216	204	185	190
November.....	201	194	234	163	216	207	186	193
December.....	203	202	230	162	211	207	185	183
Year.....	194	186	227	160	211	196	179	189



Weighted index numbers of prices.—Metals group before control began.—By months, January, 1918, to August, 1917. (Average quoted prices, July, 1918, to June, 1914—100.)



Weighted index numbers of prices.—Fuels group before control began.—By months, January, 1918, to August, 1917. (Average quoted prices, July, 1918, to June, 1914—100.)



Weighted index numbers of prices.—Food group before control began.—By months, January, 1918, to August, 1917. (Average quoted prices, July, 1918, to June, 1914—100.)

(3) THE FINAL UPWARD SWING WHICH PROVOKED GOVERNMENT CONTROL.

The war-time rises in prices before the United States entered war did not of themselves provoke Government interference. But the rises stimulated immediately by our entrance into war, were serious largely because they came after prices had already reached extraordinary heights. Between October, 1915, and December, 1916, the index number of "all commodities" had risen from 104 to 144. The gradual breaking of relations with Germany then forced other advances, and by March, 1917, the "all commodities" index stood at 156. When this country declared war in April, the index jumped 14 points in a single month.

The prices of metals had a runaway market and were carried by July, 1917, to peaks unknown before. The weighted index number for the whole metals group made by the Price Section, rose from 247 in March, the month before war was declared, to 333 by July following.¹ Basic pig iron, f. o. b. Mahoning or Shenango Valley furnaces, indeed, climbed from \$32.25 to \$52.50 in the same months, and steel plates, tank at Pittsburgh, from \$4.33 to \$9, nearly 800 per cent above their prewar quotation. The very important food group index swung upward between March and July from 142 to 167. Wheat, No. 1, northern spring, shot from \$1.98 per bushel in March to \$2.58 in July. The index number for the fuels group, in which a variation is of only less general consequence than in the food group, rose from 131 in March to 168 in July. The clothing group index number rose from 157 to 187 in the same period, the building materials group from 132 to 155, and the chemicals group from 159 to 180. It is scarcely necessary to look further than the final upward swing of prices from our entrance into war until July, for the immediate reason why the Government began formally to control prices late in the summer of 1917.

2. THE CONDITIONS THAT THREATENED FURTHER RISES.

The extraordinary rises in price, that gave occasion for price control shortly after our entrance into war, were the outcome of several large forces. Quite apart from the excitement thrown into the market by war speculation, there had arisen difficult problems of production, distribution, and purchasing which forced prices higher each day. A knowledge of these problems, which at bottom were the cause of rising markets, affords a clearer vision of what lay back of Government price control than does a mere review of price rises.

¹ The prewar price was taken as 100.

Another pressure upon American production early in 1917, with a consequent inducement to higher prices, was the demand in Europe for our metals.¹ The total exports of iron, steel, and their manufactures, which were \$251,480,677 in value for the year immediately prior to the war in Europe, had jumped to \$1,133,746,188 by 1917. The prewar exports of copper, in like manner, were \$146,222,556 in value and had been forced by European war requirements to \$322,535,344 by 1917. These data explain why metal prices in this country got out of hand until their record rise in July, 1917, brought the Government to regulate them.

(2) THE BREAKDOWN IN COAL DISTRIBUTION.

The increased demand for our coal in Europe, unlike that for others of our materials, was not an appreciable factor in the fluctuations of coal prices, since the export tonnage of neither anthracite nor bituminous coal amounted in any year to more than 5 per cent of their respective productions. But there was, of course, a tremendously increased domestic demand incited by war orders. The production of bituminous coal, which constitutes 85 per cent of the American output, jumped in 1917 to a record figure for this country, 551,790,563 tons.

It is a curious anomaly, explained only by the breakdown in our distribution by railroads and boats, that during June, 1917, when the problem was especially acute, the production of bituminous coal rose to 123 per cent of its prewar level, while the price rose to 297

¹ There follows a comparison of the actual domestic production of pig iron with the corresponding European demands as represented roughly by our exports (domestic) of iron, steel and their manufactures during the war; and, in like manner, a comparison of the copper produced in this country with the exports of domestic copper and its manufactures. A convenient tool by which to compare the variations in production and exports has been made, by turning each actual figure into a relative figure, using the respective prewar average (1913) as a base equal to 100.

Year.	Pig-iron production.		Iron, steel, and their manufactures, exports.		Copper production.		Copper and its manufactures, exports.	
	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.
	<i>Long tons.</i>				<i>Pounds.</i>			
1913.....	29,726,937	100	\$304,605,797	100	1,224,484,098	100	\$140,164,913	100
1914.....	30,966,152	104	251,480,677	83	1,150,137,192	94	146,222,556	104
1915.....	23,332,244	79	225,861,387	74	1,388,009,527	113	99,558,030	71
1916.....	29,916,213	101	621,237,972	204	1,927,850,548	157	173,946,226	124
1917.....	39,434,797	133	1,133,746,188	372	1,898,120,721	154	322,535,344	230
1918.....	38,647,397	130	1,124,999,211	369	1,910,000,000	156	268,962,821	192

per cent.¹ The heavy demands upon the railroads for the transportation of war materials, despite the extraordinary production of coal at the mines awaiting cars, created a local shortage which forced prices higher and finally brought Government interference.

(3) THE SHORTAGE OF SHIPS.

A shortage of available ships for use in transporting goods, though always an appreciable factor in determining the prices of commodities at their import and export markets, has seldom affected domestic prices as in 1917. The United States Shipping Board, had there been no war drain upon vessels, would have given an adequate relief. But when this country entered the war its main immediate responsibility was to recuperate the allied tonnage and turn ships into war uses with scant regard for commercial considerations. The result was a revolution in our foreign trading, which disturbed vitally many prices of commodities normally imported and others awaiting exportation.

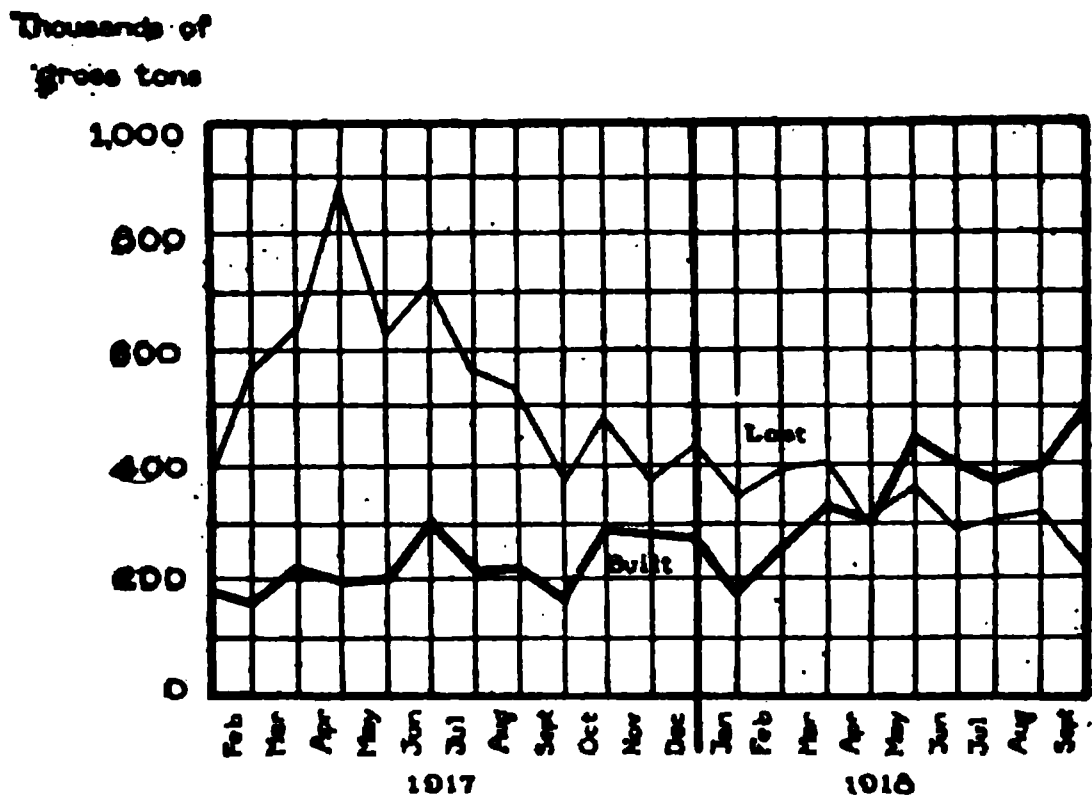
The total acquisitions of ships by the United States from April 6 to July 31, 1917, the especially acute period, exceeded the total losses. This country, in other words, gained 95 vessels, making a total of 268,969 gross tons, and lost 68 vessels, making a total of

¹ The following table compares the actual fluctuations in the production of bituminous coal in the United States by years from 1913 to 1918, and by months during 1917, with the corresponding fluctuations in prices. A ready comparison of the variations in production and prices has been facilitated by the reduction of each actual figure to a relative figure, using the respective prewar figure (average from July 1, 1913, to June 30, 1914) as a base equal to 100.

Date.	Actual.		Relative.	
	Production.	Price.	Production.	Price.
Year:	Tons.			
1913.....	478,435,297	\$1.29	105	102
1914.....	422,703,970	1.22	92	94
1915.....	442,624,426	1.19	97	94
1916.....	502,518,545	1.78	110	140
1917.....	551,790,563	3.08	121	243
1918.....	585,883,000	2.67	128	210
Months, 1917:				
January.....	47,967,354	3.73	126	294
February.....	41,352,711	3.75	108	295
March.....	47,868,652	3.53	128	276
April.....	41,854,320	3.00	110	236
May.....	47,086,452	3.72	124	293
June.....	46,824,646	3.77	123	297
July.....	46,291,572	2.98	121	235
August.....	47,372,226	3.03	124	239
September.....	45,107,956	2.12	118	167
October.....	48,337,726	2.15	127	169
November.....	47,689,801	2.58	125	203
December.....	44,037,147	2.59	116	204
Year.....	551,790,563	3.08	121	243

109,188 gross tons.¹ But the fearful shortage altogether of allied and neutral tonnage during 1917, which one time threatened the loss of the war, made our few domestic increases seem a pittance. The allied and neutral tonnage, through losses from submarines and

ALLIED AND NEUTRAL SEAGOING TONNAGE
Lost and Built



3. THE DESIRE OF THE GOVERNMENT TO MAKE ITS OWN PURCHASES AT REASONABLE COSTS.

The desire of the Government to make its own purchases at reasonable costs, after the country went to war, and the enormous quantity of materials required, might have had a very much more disastrous effect upon prices generally than appears upon the surface. It was patent that the taking of an enormous quantity of any material by the Government at a low figure would not of itself hold prices to the public at the same figure. The presumption was, on the other hand, that civilian competition for the residue stock would usually quicken and force open-market prices higher. The President early in the summer of 1917 saw that a control over Government purchases alone might unduly raise prices for the remaining stocks of the same commodity, and declared for a single price to the Government, the public, and the Allies.

4. THE GROWING DISCONTENT WITH RISING PRICES OF STAPLES.

The war-time rise in the prices of staples prior to our entrance into war was tolerated without complaint by the labor and middle classes, in the main, because there came with those increased prices a somewhat increased prosperity. A general discontent developed, however, when prices mounted higher after mobilization began reducing thousands of family budgets by taking men into camps. The earmarks of profiteering appeared at every turn during the spring of 1917, and embittered those less able, who were making honest sacrifices to help win the war. Many believed it the duty of the Government to protect them from exorbitant charges for the staple commodities, and urged this course until finally the Congress set up the machinery for a control over food and fuel prices.

5. THE INFLUENCE OF BRITISH AND FRENCH CONTROLS.

The initial handicap which the Government had to overcome in solving the problems that came to the fore in the spring of 1917, however obvious it may have appeared that regulation would effectively overcome them, was the conservative prejudice against Government control. It can not be denied that the industries of the country at the outset generally looked askance or with fear upon interference with their business. The actual experience with control in England and France helped, as nothing else could, to quiet these fears. The country generally did not know the detail of European

regulations. But the American business interests came to appreciate, through their own and British experience with rising prices, that war-time stabilization in prices could not be sustained without help from the Government. The one-time opposition to Government regulation, as price problems became more complex, turned gradually into requests for control from the industries themselves.

PART II.

THE ADMINISTRATION OF PRICE CONTROLS DURING THE WAR.

I. THE AGENCIES DELEGATED AND THE CONTROLS WHICH THEY EXERCISED.

The Government was loath to begin any regulations of prices until forced into it by excessive rises in price or by the fear of erratic markets. It then proceeded with caution and extended control over the prices of commodities at wholesale in piecemeal fashion. It so happened that the prices of wheat, sugar, metals, and coal which proved the most notable instances of regulation throughout the war, were taken in hand after the epochal rises of the midsummer and had all been put under control by the end of September, 1917. The slight machinery then set up formed the nucleus for the mechanism by which prices were controlled during the war.

There are three methods by which to survey each formal Government price control, from the setting of a minimum wheat price by law on August 10, 1917, to the withdrawal of the last regulation after the signing of the armistice. The regulations may be arranged chronologically by dates upon which each commodity came under control; they may be grouped under natural commodity divisions; or they may be classed under the war boards which exercised the controls. The latter scheme seems altogether the most useful, since it permits a chronological listing under each board at least and happens to afford a rough grouping of similar commodity controls. The various administrative boards, among which the responsibility for Government controls were distributed at the signing of the armistice, moreover, grew up in part because there were distinct kinds of control problems.

The delegation of regulatory powers over prices by the President during the war was prompted by reasons of expediency rather than logic. Price-control authority in various degrees was given to the Food Administration, the Fuel Administration, the War Industries Board, the Price Fixing Committee, the War Trade Board, the War Department, the Navy Department, the Federal Trade Commission, and the Department of Agriculture.

The Food Administration, which was created by authority conferred on the President in the food and fuel control act of August 10, 1917, was gradually given war-time control over virtually the whole

food group including wheat, flour, and bread; sugar; live stock and meats; poultry and dairy products; oleomargarine; cotton seed and cottonseed products; canned and dried foods; rice and rice flour: coarse grains and feedstuffs; coffee; ammonia; ice; and arsenic. The War Industries Board, which was made a division within the Council of National Defense on July 28, 1917, and a separate board on May 28, 1918, exercised control in the main over the prices of the great basic raw materials until the price fixing committee was appointed. Even after that it exercised control over lead, nickel, quicksilver, platinum, manganese, burlap, wood chemicals, and alkalis. The price-fixing committee, which was appointed by the President, took over from the War Industries Board on March 14, 1918, the task of fixing basic raw-material prices and regulated the prices of iron, steel, and their products, copper, aluminum, zinc, cotton textiles, cotton linters, wool, hides, skins, and leather, hemp, lumber, building materials, and acids. The Fuel Administration, which with the Food Administration was authorized by the food and fuel control act, exercised full control over the prices of anthracite and bituminous coal and coke. The War Trade Board, which was created by the President under authority from the espionage and trading-with-the-enemy acts, was given control over imports and exports, and sometimes used its license power indirectly to help control prices, especially of rubber, foreign wool, silk, quebracho, castor beans, and castor oil. The Army and Navy, by their power to requisition and commandeer, controlled prices in part for their own purchases. The Federal Trade Commission compiled extensive cost data for the price-control agencies and itself controlled certain paper prices. Lesser controls were exercised by the Department of Agriculture.

(1) THE PRESIDENT MADE A MINISTER OF PRICE CONTROLS.

The Congress did not grant to the President, or to any agency, blanket authority to work out a schematic program of general price regulation during the war. The bases in law for different regulations were varied and sometimes doubtful. The country early got at the business of regulating prices, despite its one-time caution, because the President deemed it necessary himself to become in reality a minister of price controls. There was no disposition, once the food and fuel control bill was law, to await specific authorization by the Congress when a war purpose made any price control imperative. The whole body of regulations relating to prices, whether specifically allowed by legislative enactment or set up loosely under war powers, took their final administrative authority from the President.

It is noteworthy that even the food and fuel control act, which was the one broad grant of regulatory powers over prices made by the Congress, gave power simply to the President and made no men-

tion of either a Food Administration or a Fuel Administration. It permitted the President to control foods and fuels and he, of his own accord, appointed to represent him a Food Administrator and a Fuel Administrator. These latter, in turn, set up huge organizations as their tools of administration. There was scarcely a fragment of authority for the final organization of the War Industries Board, other than the President's well known letter of March 4, 1918. The price-fixing committee was appointed by the President to represent him in fixing maximum prices and without definite citation of legislative authority. The War Trade Board, too, was an instrument of the President. The resting of final responsibility upon the President for the administration of price controls was, in point of fact, more literal than might appear, since he himself undertook to approve and to sign a majority of the regulations. An account follows of the various agencies through which he administered price control, with an analysis of the individual controls undertaken.

2. THE FOOD ADMINISTRATION.

A chronicle in detail of the planning and administration of food control during the war can scarcely be had from any available records. The United States Food Administration can not itself recount all of the controls which it administered, so multifarious were they in number, so informal in kind, and so altered from day to day. The regulation of food prices was at once the most nebulous war control exercised in America, and the most far-reaching and direct in its touch with the civilian and the soldier. It was extended to cover, in one form or another, virtually every staple food commodity and others of lesser importance.

The nature of food control in this country during war time was distinguished sharply from that of raw-material control. The prices of raw materials were, in the main, definitely fixed. The prices of foods were controlled instead by a flexible and, often, loosely applied system of margins. The raw-material control was a very much more tangible thing than the food control. It is relatively a simple task to determine upon a line where price fixing of raw materials stops and other kinds of control begin. But a study of Government control over the prices of foodstuffs involves an account of control over production, allocation of sales, distribution, priorities of manufacture and transportation, conservation of uses, amounts allowed for export and import and the allotments of shipping space. It is not apparent at first sight whether these controls are features of price regulation or not. Only a detailed examination of each instance of control will give a proper basis to judge which of those controls affected particular prices, and which, therefore, merit consideration in a study of Government control over prices.

The real beginnings of food control were made the day following our entrance into war, when the Council of National Defense cabled Mr. Herbert Hoover a request that he become its advisor upon food and price problems. Mr. Hoover, in reponse to that and a later cablegram from the President, arrived at New York from Europe on May 3, 1917, and set up an office, with a stenographer, in a hotel at Washington on the following morning.

The President was anxious to start a study of the food problem at once and, pending legislation, appointed Mr. Hoover Food Administrator of the United States on May 17. There was, meantime, no authority for any thoroughgoing regulation, but the newly appointed Food Administrator, under special allowances from the

President's emergency fund, laid the foundations for a food-control law. He had, by the time the food bill was passed, already built up a staff of 450 persons. At his instance during that interim, furthermore, over 100 conferences were held with the trade, important informal agreements were reached, and contacts cemented that determined the later courses of action. Too little emphasis might easily be given to the length of the step, from free competition and soaring prices at our declaration of war into price control. Mr. Hoover, fresh from Europe and in touch with the food, military, submarine, and shipping situations, was in a peculiarly strategic position to help hasten that transition. He impressed the country with the belief that the Allies were in more immediate need of food than of men; that the shortage of ships made it expedient that this food come largely from North America, since shipments from Australia or Argentina would require two and three times as much tonnage, respectively, to haul an equal amount; that the Allies would need perhaps 500,000,000 bushels of wheat beyond their own crops for the next year, and close to 1,000,000,000 bushels of all cereals; that there was prevalent a speculation in wheat, prompted by bidding for the residue available for export, which had already boosted the price of flour from \$9 to \$15 per barrel. These facts were told in a straightforward manner the country over, and acted as a leaven preparing the way for Government control. The American, not accustomed to war-time control, reacted favorably when told that his own wheat could be exported across the Atlantic, and made into bread that sold there under Government control, at a price in Belgium amounting to 60 per cent of the price which he paid at New York; in France, at a price 40 per cent below his own; and in England at a price 30 per cent below his own. This propaganda, backed strongly by the President, and the general confidence in Mr. Hoover inspired by his long and intimate contact with food control in Belgium, France, and England, was the force which got the United States promptly into the business of controlling her foodstuffs by the summer of 1917.

The debates in Congress upon the so-called Lever bill began immediately after its introduction on June 11, and dragged on, as the President believed in a "tedious and vexatious" manner, for the whole of two months. But, pressing as the wheat and sugar situations seemed then for more immediate action, the long drawn-out hearings and discussions during the summer did teach the Government and the country much about their problem. The bill was finally made into the food-control act on August 10, 1917. That act set forth the basis of all later food control, granted wide powers to the President under which he created the United States Food Administration, and fixed a minimum price for wheat. It gave legal

status, really, to all that Mr. Hoover had done at Washington of an informal character in the three months previous. There were proposed at the Capitol scores of amendments, some of which were written into the bill and gave it different character, but altogether the law as signed by the President set up the kind of control for which he and Mr. Hoover had long asked.

(1) THE FOOD-CONTROL ACT.

The food-control act, made from the Lever bill, and sometimes called the food and fuel control act, was the most important measure for controlling prices which the United States took during the war or had ever taken. It was the basis for the whole of war-time control of food and fuel as well. It, more than any other statute, requires an analysis in this inquiry.

THE PURPOSES OF THE ACT.

The declared purpose of the act, and the sweeping control which it held in contemplation, can be pictured no more impressively than through a repetition of the terminology written into the law. The act states as its aim—

to assure an adequate supply and equitable distribution, and to facilitate the movement, of foods, feeds, fuel, including fuel oil and natural gas, and fertilizer and fertilizer ingredients, tools, utensils, implements, machinery, and equipment required for the actual production of foods, feeds, and fuel, hereafter in this act called necessities; to prevent, locally or generally, scarcity, monopolization, hoarding, injurious speculation, manipulations, and private controls affecting such supply, distribution, and movement; and to establish and maintain governmental control of such necessities during the war—

and authorizes the President to issue any regulations or orders necessary to carry out its provisions. It makes the purposes of Congress even more definite, by the specific acts which it declares unlawful—

it is hereby made unlawful for any person willfully to destroy any necessities for the purpose of enhancing the price or restricting the supply thereof; knowingly to commit waste or willfully to permit preventable deterioration of any necessities in or in connection with their production, manufacture, or distribution; to hoard, as defined in section 6 of this act, any necessities; to monopolize or attempt to monopolize, either locally or generally, any necessities; to engage in any discriminatory and unfair, or any deceptive or wasteful practice or device, or to make any unjust or unreasonable rate or charge, in handling or dealing in or with any necessities; to conspire, combine, agree, or arrange with any other person, (a) to limit the facilities for transporting, producing, harvesting, manufacturing, supplying, storing, or dealing in any necessities; (b) to restrict the supply of any necessities; (c) to restrict distribution of any necessities; (d) to prevent, limit, or lessen the manufacture or production of any necessities in order to enhance the price thereof; or (e) to exact excessive prices for any necessities, or to aid or abet the doing of any act made unlawful by this section—

and which comprehend very nearly all private abuses pertinent to the war-time food problem.

The outstanding feature of the whole act is the kind of control by which it proposes to accomplish these ends. The Congress, in full knowledge of the various experiences of England and France, determined finally that the domestic situation lent itself more readily to a system of license control over the manufacture and distribution of foods than to a system either of fixed or maximum prices. The transition to a war-time basis, it was felt, should be made more gradual than either of the latter alternatives would permit. It was believed, too, that the patriotism of the people could be relied upon to carry through the less rigid program of control. Other features of especial note in the act were the powers which it delegated to the President to requisition "necessaries"; to purchase or store wheat, flour, meal, beans, and potatoes; to take over for use or operation by the Government factories or plants manufacturing "necessaries"; to regulate or prohibit operations of exchanges and boards of trade; to commandeer distilled spirits; and to fix the prices of coal and coke. It was this law also which guaranteed a minimum price of \$2 per bushel for wheat, binding until May, 1919, and provided that the President might fix a higher price at his discretion.

THE LICENSE SYSTEM.

The backbone of the administration of war-time control over foods lay in the license system and the many rules and regulations which were imposed upon all who came under it. The law itself set up control over no particular commodities, with the exception of wheat. It simply gave the President power, by issuing proclamations from time to time, to bring under license control dealers in those commodities which he and the Food Administrator wanted to regulate. The name of every class of food that was controlled, presumably, may be found in the different proclamations made by the President between August 10, 1917, and the close of war, in which he declared that dealers in the foodstuffs specified must secure a license from the Food Administration before doing further business. The first of these proclamations, aside from the Executive order issued the day the law was signed creating the Food Administration and appointing Herbert Hoover as Food Administrator, was issued August 14, 1917, and called for the licensing of wheat and rye elevators and millers. By all odds the most important of all the proclamations was that of October 8, 1917, which called in substance for the licensing of every dealer in any staple food commodity. It provided for the licensing of manufacturers and distributors of wheat, rye, barley, flours, oats, oatmeal, corn, cornmeal, rice, dried beans or peas, cotton seed, vegetable oils, lard, milk, butter, cheese, beef, pork, mutton, poultry, eggs, fish, fruits, vegetables, canned goods, dried fruits, and sugar. Proclamation by proclamation the list of dealers from whom

licenses were required was extended, until at the end virtually the whole food group was under license control.¹

The discretion left by the act to the administrators for the determination of dealers who may be licensed was exceeded in scope only by that left to them for the determination of foods that may be put under license control. The law in no sense tied the hands of the food administrators in the latter respect. It gave them power to control any and all foods or feeds. There were, moreover, but few dealers in those foods or feeds whom they might not bring under license control. The substance of the law was that all persons engaged in the importation, manufacture, storage, mining, or distribution of any necessities might be licensed. But two exceptions especially important were made to that general rule. The law specifically exempted from license control all farm and garden producers and all retailers whose gross annual sales fell below \$100,000.

¹ The President signed 8 Executive orders and 19 proclamations under this act from Aug. 10, 1917, to Nov. 25, 1918, as follows:

EXECUTIVE ORDERS.

Aug. 10, 1917. Providing for organization of United States Food Administration.

Aug. 14, 1917. Providing for organization of Food Administration Grain Corporation.

Sept. 2, 1917. Directing Treasury Department to enforce secs. 15 and 16 of food-control act.

Sept. 27, 1917. Providing for appointment of secretaries to Federal food administrators without civil-service examination.

Oct. 28, 1917. Providing for requisitioning of foods and feeds.

Nov. 10, 1917. Amending civil-service regulations.

Nov. 27, 1917. Authorizing United States Food Administrator to find that fair profit is normal average prewar profit.

June 21, 1918. Designating Food Administration Grain Corporation as agency of United States to purchase wheat, and directing that capital stock be increased.

PROCLAMATIONS.

Aug. 14, 1917. Licensing of wheat and rye elevators and millers.

Sept. 7, 1917. Licensing of importers, manufacturers, and refiners of sugar, sugar sirups, and molasses.

Oct. 8, 1917. Licensing of manufacturers and distributors of certain food commodities.

Nov. 7, 1917. Licensing bakers.

Nov. 15, 1917. Licensing of arsenic industry.

Dec. 8, 1917. Limiting alcoholic content of malt liquor.

Jan. 3, 1918. Licensing of ammonia industry.

Jan. 10, 1918. Licensing the importation, manufacture, storage, and distribution of feeds and certain other food commodities.

Jan. 18, 1918. Conservation of wheat.

Jan. 30, 1918. Licensing of bakers not already licensed, and importers and distributors of green coffee.

Feb. 21, 1918. Fixing guaranteed prices for 1918 wheat crop.

Feb. 25, 1918. Licensing of fertilizer industry.

May 14, 1918. Licensing of farm-equipment industry.

May 14, 1918. Licensing packers of canned tuna and others.

June 18, 1918. Licensing of stockyards.

Sept. 2, 1918. Fixing guaranteed prices for 1919 wheat crop.

Sept. 6, 1918. Licensing of dealers in live or dead cattle, sheep, swine, or goats.

Sept. 16, 1918. Prohibiting manufacture of malt liquors.

Nov. 2, 1918. Licensing operators of warehouses storing goods and feeds for hire and others.

THE TEETH OF THE STATUTE.

There were put into the statute itself, quite apart from any regulations which the Food Administration might later set up under it, enforcement clauses which were powerful weapons in the administration of its provisions. It contained the threat of a fine of \$5,000 or \$10,000 against violators of nearly every section in the law, or imprisonment for not more than four or five years. The law, in the famous section 4, specifically declared it to be unlawful to destroy any necessities for the purpose of enhancing the price; to waste necessities; to hoard necessities; to monopolize necessities; to make any unjust or unreasonable rate or charge in handling necessities; to restrict the facilities for transporting, producing, harvesting, manufacturing, supplying, storing, or dealing in necessities; to restrict the distribution of necessities; or to exact excessive prices for any necessities. This section, though the most sweeping in its statement of unlawful practices, left some ambiguity as to penalties for its enforcement. There was, moreover, written into the law an authorization for the President to requisition foods, and another for him to make purchases. Those powers, however little exercised, stood always as effective potential instruments. But, quite aside from these penalties in the law, there was, of course, a much more effective instrument in the appeal to a war-time spirit of cooperation. By no other price-control agency at Washington were there set up so many legal and patriotism-arousing devices for the enforcement of their regulations.

THE FIXING OF A MINIMUM PRICE FOR WHEAT.

The fixing of a minimum price for wheat is another phase of the food-control act which deserves especial note, both because of its own merit and because it represents a distinct break in policy with the rest of the act. Wheat was the only commodity for which the law fixed a price. It was the only food commodity for which the law specifically stated that a price might be fixed. But even the license section, so many believe, opened a way for fixing food prices to be charged by licensees. In any case, there was left no doubt what was to be done about wheat. A definite guarantee of \$2 per bushel for all No. 1 Northern spring wheat, at Chicago, was made for deliveries up to May 1, 1919. The prices of equivalent wheats or other standard grades at various markets were to be figured, upon that scale, by the official grain standards established under the United States grain-standards act. The President, while not permitted to set aside this guaranteed minimum price fixed in law, was given

power to increase the guaranteed minimum from time to time to encourage production. In point of fact he did increase that minimum to \$2.20 for the 1918 crop, by proclamation on February 21, 1918, and again to \$2.26, for the 1919 crop, by proclamation on September 2, 1918. The effectiveness of the guarantee was assured by an authorization to purchase any wheat, if occasion demanded, for which a minimum price had been guaranteed.

The food-control bill was enacted into law only through the pressure of war emergencies and, in keeping with the arguments which were used for its passage, contains a clause that it shall cease to be in effect when the President shall proclaim that the war against Germany has terminated.

(2) THE POLICIES OF THE FOOD ADMINISTRATOR.

The considerable leeway in control over food which the act gave to the President makes peculiarly important an analysis in full of the policies of his Food Administrator. The act, with a single conspicuous exception, left wide powers with the President which he might or might not use. The policies of food control in which Mr. Herbert Hoover believed, therefore, can not but call for careful consideration.

Mr. Hoover returned to this country with his mind fully adjusted to and familiar with the several experiences with food control in Europe. The President, after issuing his own general program for food control on May 19, 1917, depended upon the advice and leadership of Mr. Hoover for establishing a proper administration of control. There was scarcely a limit of regulatory experience which had not been tried out abroad. The British food controller at our entrance into war, indeed, had already been given power to set minimum or maximum prices and to fix prices absolutely. Those facts were outlined to the Government by Mr. Hoover within a week after his return.¹ It is noteworthy in the light of these and later developments that Mr. Hoover upon his arrival laid before the President these five cardinal principles of food control: First, that the food problem is one rather of wise administration than "dictatorship"; second, that administration can be carried out largely through constituted agencies of producers, distributors, and consumers; third, the organization of the community for volunteer conservation of foodstuffs; fourth, that all important positions, so far as may be, shall be filled with volunteers; and fifth, the centering of independent responsibility for food administration directly under the President, with cooperation from the Department

¹ Letter from Mr. Hoover to the Secretary of State of date May 10, 1917.

of Agriculture, the Department of Commerce, the Federal Trade Commission, and the railway executives.¹

Mr. Hoover at the outset of his administration settled upon the policies of control for which he intended to work and upon the gen-

¹President Wilson, on May 19, 1917, soon after the return of Mr. Hoover from Europe, appointed Mr. Hoover as Food Administrator pending legislation and issued the following program for food control:

"It is very desirable, in order to prevent misunderstandings or alarms and to assure cooperation in a vital matter, that the country should understand exactly the scope and purpose of the very great powers which I have thought it necessary in the circumstances to ask Congress to put in my hands with regard to our food supplies. Those powers are very great, indeed, but they are no greater than it has proven necessary to lodge in the other Governments which are conducting this momentous war, and their object is stimulation and conservation, not arbitrary restraint or injurious interference with the normal processes of production. They are intended to benefit and assist the farmer and all those who play a legitimate part in the preparation, distribution, and marketing of foodstuffs.

"It is proposed to draw a sharp line of distinction between the normal activities of the Government represented in the Department of Agriculture in reference to food production, conservation, and marketing, on the one hand, and the emergency activities necessitated by the war in reference to the regulation of food distribution and consumption, on the other. All measures intended directly to extend the normal activities of the Department of Agriculture in reference to the production, conservation, and the marketing of farm crops will be administered, as in normal times, through that department, and the powers asked for over distribution and consumption, over exports, imports, prices, purchase, and requisition of commodities, storing, and the like, which may require regulation during the war will be placed in the hands of a commissioner of food administration, appointed by the President and directly responsible to him.

OBJECTS SOUGHT BY LEGISLATION.

"The objects sought to be served by the legislation asked for are: Full inquiry into the existing available stocks of foodstuffs and into the costs and practices of the various food producing and distributing trades; the prevention of all unwarranted hoarding of every kind and of the control of foodstuffs by persons who are not in any legitimate sense producers, dealers, or traders; the requisitioning, when necessary for the public use, of food supplies and of the equipment necessary for handling them properly; the licensing of wholesome and legitimate mixtures and milling percentages, and the prohibition of the unnecessary or wasteful use of foods.

"Authority is asked also to establish prices, but not in order to limit the profits of the farmers, but only to guarantee to them when necessary a minimum price which will insure them a profit where they are asked to attempt new crops and to secure the consumer against extortion by breaking up corners and attempts at speculation, when they occur, by fixing temporarily a reasonable price at which middlemen must sell.

"I have asked Mr. Herbert Hoover to undertake this all-important task of food administration. He has expressed his willingness to do so on condition that he is to receive no payment for his services and that the whole of the force under him, exclusive of clerical assistance, shall be employed, so far as possible, upon the same volunteer basis. He has expressed his confidence that this difficult matter of food administration can be successfully accomplished through the voluntary cooperation and direction of legitimate distributors of foodstuffs and with the help of the women of the country.

"Although it is absolutely necessary that unquestionable powers shall be placed in my hands in order to insure the success of this administration of the food supplies of the country, I am confident that the exercise of these powers will be necessary only in the few cases where some small and selfish minority proves unwilling to put the Nation's interests above personal advantage, and that the whole country will heartily support Mr. Hoover's efforts by supplying the necessary volunteer agencies throughout the country for the intelligent control of food consumption and securing the cooperation of the most capable leaders of the very interests most directly affected, that the exercise of the powers deputed to him will rest very successfully upon the good will and cooperation of the people themselves, and that the ordinary economic machinery of the country will be left substantially undisturbed.

FOOD ADMINISTRATION ONLY WHILE WAR LASTS.

"The proposed food administration is intended, of course, only to meet a manifest emergency and to continue only while the war lasts. Since it will be composed for the most part of volunteers, there need be no fear of the possibility of a permanent

eral skeleton of organization by which he hoped to administer them. The general approach to his problem, from an organization standpoint, seems to have come to him before the detailed policies of control. He gave out again and again during the spring of 1917 statements that food control to him fell into four great branches: First, the control of exports; second, the setting up of instrumentalities to regulate or do away with speculation; third, the mobilization of the women and men of the country engaged in personal distribution of foods as actual members of the Food Administration to carry out national conservation; and, fourth, the erection in every State of a Federal State food administration and the decentralization so far as possible of functions into State administrations. Of this organization plan for control no more need here be said. But the policies of control which were worked out under that broad plan do require especial analysis. In a word, it may be said that the outstanding policies of the Food Administrator were those declaring against fixing absolute prices, the "reasonable margin of profit" rule, the disregard of replacement value in fixing margins, the spirit of co-operation extended to the trade, and the faith that was placed upon campaigns of education.

NO FIXED PRICES ESTABLISHED.

No other policy of the Food Administrator bore as much significance perhaps, or showed so distinctly in the act, as the policy not to fix prices in the common sense. It matters little for the purpose at hand whether that was from the outset a determined policy, based upon European experiences, or one forced by the exigencies of a political situation. The food control act as passed does not, at any rate, specifically empower the fixing either of minimum, absolute or maximum prices on foodstuffs.¹ It appears, in fact, to be an act designed quite as much to control the manufacture, distribution, and conservation of commodities within the food industry as to control the prices of foods. But the impression must not be harbored that the act was loosely drawn or toothless even as to the point at issue in

bureaucracy arising out of it. All control of consumption will disappear when the emergency has passed. It is with that object in view that the administration considers it to be of pre-eminent importance that the existing associations of producers and distributors of foodstuffs should be mobilized and made use of on a volunteer basis. The successful conduct of the projected food administration by such means will be the finest possible demonstration of the willingness, the ability, and the efficiency of democracy and of its justified reliance upon the freedom of individual initiative. The last thing that any American could contemplate with equanimity would be the introduction of anything resembling Prussian autocracy into the food control of this country.

"It is of vital interest and importance to every man who produces food and to every man who takes part in its distribution that these policies thus liberally administered should succeed and succeed altogether. It is only in that way that we can prove it to be absolutely unnecessary to resort to the rigorous and drastic measures which have proved to be necessary in some of the European countries."

¹ The one exception to that policy was wheat.

this monograph. The contrary was so distinctly true that, had occasion demanded, foods could have been requisitioned without further legislation. Mr. Hoover, though more in touch with the need for food abroad than anyone else, did not believe that it was necessary for this country to be put upon a ration basis at once, or even a fixed-price basis. He believed that a sufficient saving and price control could be effected through approximate measures. In a broad way it appeared to him simply that war-time demands had given rise to speculation and destroyed the ordinary balances and checks upon prices. He had in mind at the beginning, therefore, no rigid price fixing, but a stimulation of patriotism which would set the country at large to saving food, help the administration to check speculation, and restore the "balance wheel on prices."¹ The motto for the Nation, indeed, which Mr. Hoover gave out just following his acceptance of the food administratorship was "Eat plenty, wisely, without waste." It was left to him to set up more stringent regulations later on as each situation required.²

THE "REASONABLE MARGIN-OF-PROFIT" RULE.

The real price control within the Food Administration came from its common requirement that licensees, covering dealers virtually in all food commodities, should not receive more than a "reasonable margin of profit." This rule, prohibiting unreasonable profits, was incorporated in the general license regulations. It was thereby made applicable to all licensees, save only salt-water fishermen, the importation, manufacture, storage, and distribution of food commodities and feeds. A somewhat broader definition of the "reasonable-margin-of-profit" rule may be had from the language of the general regulations:

The licensee shall not import, manufacture, store, distribute, sell, or otherwise handle any food commodities on any unjust, exorbitant, unreasonable, discriminatory, or unfair commission, profit, or storage charge.

This general requirement, that profits of all licensees be reasonable, does not indicate what would be considered a reasonable profit. The question arises at once, What did the Food Administrator be-

¹ It is difficult to find a more precise statement of the early policies of Mr. Hoover upon price control of foods than that which he gave in a statement on May 19, 1917, as follows: "The consequence is that a sudden demand or concerted effort of speculation can entirely upset price conditions in the United States to a degree hitherto unknown, and it is necessary for us to devise with the best thought of this country a temporary balance by which we can establish stability of prices in the great staples, bearing in mind always that we must maintain production by assuring good return to the producer, and at the same time will diminish the cost of living, lest we face social readjustments and strike disturbances, with consequent loss of national efficiency."

² The testimony of Mr. Hoover before the Senate Committee on Agriculture and Forestry on May 8, 1917, throws some light upon his reactions to the experience of Europe with maximum and minimum prices for foodstuffs. It is here quoted in part:

"Senator BRADY. Do you feel that we should make a minimum price on farm products?"

"Mr. HOOVER. On the price question there are in this world three conceptions: The agricultural population in this country or any other country would like to have a mini-

lieve, as a general policy to guide him in issuing special regulations, was a reasonable profit? The working out of that general policy gave shape to three rather definite phases of the rule: That the "reasonable margin of profit" must be figured upon a cost basis, the fixing of maximum margins of profit, and the disregard of replacement value in fixing margins.

mum price. The minimum price is a protection solely to the producer, and it is capable of execution, because such a thing would probably be backed by the Government who could pay the money. Now, the consumer, on the other hand, clamors for a maximum price to protect him. A maximum price has proved a total failure in Europe in every case, except where the Government owned enough of the commodity that it could control the market.

"Senator NORRIS. Has the minimum price been successful there?

"Mr. HOOVER. Yes; it has been used as an effective agent to stimulation.

"Senator NORRIS. The maximum price has proved a failure?

"Mr. HOOVER. The maximum price has proved a failure in all cases, except where the Government controlled enough of the commodity. I might make that clear by stating that the French Government imported last year about 25 per cent of their breadstuffs requirements and bought those breadstuffs for the Government and used that as a club to maintain the maximum price, but in all commodities where there is no club of that character the maximum price is a total failure.

"Senator WADSWORTH. From the standpoint of the consumer?

"Mr. HOOVER. Well, as a matter of operation. I might tell you why it fails. The establishment of a maximum price is, in itself, the result of a shortage of supply; otherwise, we do not do it. You have less foodstuffs than will go around to the whole of the consumers' demand, and therefore you put on a maximum price.

"Senator GRONNA. Which discourages production, does it not—the maximum price?

"Mr. HOOVER. It all depends on the price.

"Senator GRONNA. But in order to satisfy the consumer it would naturally discourage production?

"Senator SMITH of Georgia. Unless it was high?

"Mr. HOOVER. Unless it was high.

"Senator GRONNA. That would not satisfy the consumer?

"Mr. HOOVER. No; but just to elaborate the reasons why it failed, you find immediately when a maximum price is established that all of the consumers of the country who can open a chain directly with the producer at once do so, and they not only open a chain for their daily needs, but they proceed to hoard at once, and the phenomenon accompanying a maximum price—I think Dr. Taylor will confirm this—has been the total disappearance of that commodity all the way from a fortnight to three months from the normal market, because those minority consumers who can reach the producer directly will absorb the whole supply and they will make their own bargains, and often if they do make it they set up a cycle; and it has been an economic failure, except where there has been a club to enforce it.

"The CHAIRMAN. A maximum price that was too low would have that effect anyway, would it not—the consumption of the total supply?

"Mr. HOOVER. If you have a shortage in supply, there is no maximum price that holds. You can put it as high as you like where there is insufficiency of supply.

"Senator SMITH of Georgia. The maximum price has only been effectual where the Government controlled the commodity and put the price down so as to put the commodity in reach of the people, and that very act checks exorbitant price.

"Mr. HOOVER. Yes. They could, in effect, manipulate the price if they wanted to.

"Senator BRADY. From the trend of your interesting statement (regarding wheat and other control abroad), Mr. Hoover, it seems to me it leads to the fixing of an arbitrary price rather than a minimum or maximum price?

"Mr. HOOVER. That is our view; that is our experience in Belgium; we come to fix an arbitrary price. I might say that was discussed between myself and the English food controller and the French food controller, but they did not have to do it, because they have the import implement of control by which they could handle the market."

THE COST BASIS.

The first phase of the "reasonable margin of profit" rule was so important that it came frequently itself to be known as the "cost basis" rule. It was, however, in reality, simply a part of the larger rule. It stated that the cost of the commodity, rather than the market value, should be the starting point from which to figure the "reasonable margin of profit" allowable. The food-control act gave no authority to demand that anybody should sell goods below the actual cost, and there was no means, therefore, if there had been inclination, to enforce a basic price. The design of the law, apparently, was simply to prohibit the exaction of unreasonable prices in foodstuffs. A basic price, it was believed, even if set, would necessarily have had to be near the prevailing market. That general practice then would have given enormous profits to dealers who had bought their goods through contract a year previous at lower figures. It was the inclination of the trade, naturally, to have the Food Administration begin to calculate a "reasonable margin of profit" from the market value or cost of replacement. The administrators of food control stuck in principle, however, to the cost of the goods as the proper basis for determining profits allowable throughout the war. ✓

Once it was determined to accept costs as the base, above which a "reasonable" profit would be allowed, an interpretation of "reasonable" was imperative. Mr. Hoover gave emphasis to his belief that no person was entitled to make more profit from any employment than he could have made under prewar conditions.¹ He did not interpret this policy to mean, however, that no licensee could charge more than a prewar price. A due allowance was made for increased cost of raw materials, labor, and manufacture. The word "reasonable" was construed to mean the average percentage of profit made in prewar times (taking the three years prior to the European war as a basis) on the same commodity, with an even market, and under freely competitive conditions. One of the strongest or weakest features of the "reasonable margin of profit" rule, according to the point of view, is that it sets up no uniform or fixed price for a particular commodity at various markets or within the same market. Each dealer is allowed his "reasonable" margin of profit. It becomes patent that the effectiveness of the rule depends upon the rigor of its enforcement. That rule was, in any event, the bulwark of price control administered over foods. ✓

¹Mr. Hoover, in a speech before the Pittsburgh Press Club on April 18, 1918, said in part: "I do not believe that any person in the United States has a right to make 1 cent more profit out of any employment than he would have made under prewar conditions. I do not care whether this refers to the farmer, to the laborer, to the manufacturer, to the middleman, or to the retailer. To me every cent taken beyond this standard is money abstracted from the blood and sacrifice of the American people."

FIXING MAXIMUM WHOLESALE AND RETAIL MARGINS.

The scheme of holding food profits to a "reasonable" margin of profit underwent some evolution before it was finally determined to fix definite maximum margins for wholesalers and later for retailers. The earlier difficulties were really gropings for a mechanism by which to find the average prewar nonspeculative profits. At first the dealer was allowed to base his present profits upon his prewar percentage of profits. For example, if he made 10 per cent on canned tomatoes before the war, he might make 10 per cent on them during the war. But since the prices of canned tomatoes had materially advanced during the war, of course, 10 per cent of absolute profit over a war-time price meant more to the dealer than that percentage had meant over his prewar price. This extra profit, in a general way, was assumed necessary to cover increased investment and costs of doing business. But neither the trade nor the Food Administration was pleased with that interpretation of the rule. It at once put a handicap upon the conscientious dealer and left the Food Administration no definite standard for enforcing the law. No one could say, in a clear-cut way, what the law was.

✓ The final step in control by margins was reached when, on April 6, 1918, the Food Administration announced a series of definite maximum margins of profit allowable on the more important staples at wholesale. There had been fear, in working out the plan, that the low-cost dealers would increase their profits to the basis of the widely applicable, and therefore, higher margins. A definitely fixed margin might be reasonable for one dealer but afford excessive profits to another. Accordingly, it was determined to fix a high and low maximum margin upon each item. The higher margin was to be made applicable to the dealers with high costs, and the lower margin ✓ to those with relatively low costs. In order not to destroy competitive conditions tending to reduce prices below the maximum, neither margin was made a minimum one. They were simply maxima, beyond which profits would not *prima facie* be considered reasonable or lawful. It was a great relief to the trade, and the administrators, to have definite margins prescribed as standards and it made, altogether, for better results. The Distribution Division, indeed, attributed to it a material reduction in average profits by reason, in part, of its easier enforcement. Soon it was possible to dispense with the jobbers' monthly reports and enforce the rule by aid simply of inspections and special reports.

It ought to be made clear that the maximum margins were not final, definite standards. It was conceivable that they might be exceeded lawfully or that dealers making less than they stipulated might be taking unreasonable profits. They were the maximum mar-

gins of profit which the Food Administration, without further evidence, would consider reasonable. An individual who believed them too low must take the burden of proof upon himself to show that his profits in excess of the announced margins were reasonable. But, as a matter of practise, the margins operated as definite standard maxima which were not to be exceeded in any case. On the other hand, the institution of these fixed maximum margins did not (until June 6, 1918) abrogate the rule that no man could make more than a reasonable profit, even though that profit was less than the maximum prescribed.

The Food Administration, between April 6, 1918, and the signing of the armistice, announced maximum margins on sales by wholesalers to retailers on a large number of the more important staples (sugar, wheat and other flour, lard, lard substitutes, standard hams, bacon, condensed and evaporated milk, rice, hominy, grits, oatmeal, rolled oats, cornmeal, beans, corn oil, sirup, cottonseed oil, canned peas, tomatoes, corn, beans, salmon and sardines, dried prunes, apples, peaches and raisins, and buckwheat) at margins varying from 50 cents to 75 cents per barrel on wheat flour down to 1 cent to 2 cents per pound on standard hams and bacon.¹ Under the announcement of April 6 the rule limiting profits to a prewar basis was held to apply to all licensed articles, whether the margins had been fixed or not, while in that of June 6 the prewar rule was only applied to licensed commodities upon which no specific margins had been established.

The task of establishing maximum retail margins, even apart from the handicap in the law, was greater far than that establishing the above wholesale margins. There were vast differences in the cost

¹ Wholesale margins: The most complete list of maximum margins on sales by wholesalers to retailers is that of June 6, 1918, below. The margins set forth on Apr. 6 previous are extended in this later list, and the June 6 list is, therefore (except for an increase in the maximum for flour set on Nov. 4, 60 cents to 90 cents per barrel; the setting of a maximum for buckwheat flour on Nov. 8 at 10 to 12½ per cent; and a margin of 2½ cents per pound on oleomargarine and butter substitutes announced on Dec. 5), the one which remained in force from that time on.

COMMODITIES, MAXIMUM MARGINS.

Sugar, 15 cents to 35 cents per 100 pounds.

Wheat flour, 50 cents to 75 cents per barrel.

Lard, lard substitutes, bulk (packages of 50 pounds or over), 1½ cents to 2 cents per pound.

Standard hams, bacon, 1 cent to 2 cents per pound.

All flours (except wheat), lard and lard substitutes, in packages (less than 50 pounds), condensed, evaporated milk, 8 to 10 per cent.

Rice, hominy, grits, oatmeal, rolled oats, corn meal, beans, in bulk (packages of 25 pounds or over), 10 to 12½ per cent.

Rice, corn meal, hominy, grits, oatmeal, self-rising and prepared flour, and rolled oats, all in packages; corn oil, corn sirup, sugarhouse sirup, mixed sugar and corn sirup, and cottonseed oil; standard and extra standard licensed canned peas, tomatoes, corn, and canned dried beans, and pink, chum, and red salmon and all domestic sardines; all dried prunes, apples, peaches, raisins, 12 to 15 per cent.

of doing business throughout the country, and the control of retail prices was left largely to the local food administrators and to price-interpreting boards. The same requirement for more definite standards of what was to be considered a “reasonable” profit, however, finally forced the making of retail margins. Margins were early fixed for sugar and flour at retail and later for butter, butter substitutes, eggs and cheese. Finally, on November 7, 1918, a definite list of maximum margins for sales by retailers to consumers was announced.¹ Retailers were warned that these margins were maxima only, and were not to be construed as absolute margins. A retailer, moreover, who ordinarily sold these commodities for less than the specified margin was not under the rule permitted to increase his profit beyond that normal point.

DISREGARD OF REPLACEMENT VALUE.

It was also a declared policy worthy of note, that the Food Administrator in setting margins for commodities at retail, as well

¹ Retail margins: The Food Administration, on Nov. 7, 1918, made the following announcement of maximum retail margins:

Maximum margins on sales by retailers to consumers: The Food Administration has determined that any sales of food commodities at a gross margin above delivered cost in excess of those indicated below are unreasonable, and will be regarded as prima facie evidence of a violation of the statute and of the above regulation. Percentage may be calculated on the selling price. Delivered cost shall mean the cost at the railroad, steamboat, or other terminal in the retailer's town. Where the retailer is not located in a railroad or steamboat town he may include any hauling charge in the delivered cost.

The lesser margin indicated is not a minimum margin, but is a maximum margin for those whose cost of doing business is less, such as stores which do not perform the services of credit and delivery. Any change from the prewar practice in cash discount terms or other changes which tend to or result in increasing the margin of profit allowed will be dealt with as an unfair practice.

The retailer may have the benefit of fractional costs on each transaction; that is, he may calculate the total charge to a customer on any transaction as if fractional costs were not allowed, and if the result is a fraction, he may add thereto such fraction of a cent as may be necessary to make a price in even cents. The following table gives an example in the case of eggs, using the cash and carry margin of 7 cents per dozen:

Amount of sale.	Cost.	Margin.	Total.	Fraction added.	Maximum selling price.
		Cents.			
1 dozen.....	\$0.46½	7	\$0.53½	¾	\$0.54
2 dozen.....	.92½	14	1.06½	¾	1.07
3 dozen.....	1.38½	21	1.59½	¾	1.60

MAXIMUM MARGINS.

- Victory flour, original mill packages, one-half-barrel quantities and more, \$1 to \$1.20 per barrel.
- Victory flour, original mill packages, one-fourth-barrel quantities and less, \$1.35 to \$1.60 per barrel.
- Victory flour, broken mill packages, 1½ cents per pound.
- Wheat flour, original mill packages, one-half-barrel quantities and more, \$1 to \$1.20 per barrel.
- Wheat flour, original mill packages, one-fourth-barrel quantities and less, \$1.35 to \$1.60 per barrel.

as wholesale, gave no regard to the replacement value in determining upon the maximum. He was not concerned, in other words, so much with market value as with equitable distribution. The cost of purchase, not the cost of replacement, was adopted as the sounder basis for determining what was a reasonable profit to allow.

AGREEMENTS WITH THE TRADE.

The experience of the Food Administrator in Europe, together with his conferences here throughout the spring of 1917 and his own instinctive point of view, gave him a determined faith in the integrity and general honesty of the trade. He maintained, as a cardinal policy from the beginning, a very close and intimate contact with the trade. The men, whom he chose to head his various commodity sections and responsible positions, were in a large measure tradesmen. They were, too, generally volunteers. The determination of policies of control within each branch of the food industry was made in conference with the tradesmen of that branch,

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- Wheat flour, broken mill packages, 1½ cents per pound.
 - Barley flour, original mill packages, 18 to 22 per cent.
 - Barley flour, broken mill packages, 1½ cents per pound.
 - Rye flour, original mill packages, 18 to 22 per cent.
 - Rye flour, broken mill packages, 1½ cents per pound.
 - Corn flour, original mill packages, 18 to 22 per cent.
 - Corn flour, broken mill packages, 1½ cents per pound.
 - Rice flour, 18 to 22 per cent.
 - Corn meal, bulk, 1½ cents per pound.
 - Corn meal, original mill packages, 18 to 22 per cent.
 - Hominy, 18 to 22 per cent.
 - Sugar, all kinds, in bulk, 1½ cents per pound.
 - Sugar, all kinds, in refiners' original packages, 1 cent per pound.
 - Evaporated milk, unsweetened, 18 to 22 per cent.
 - Oat meal and rolled oats, bulk, 1½ cents per pound.
 - Oat meal and rolled oats, original mill packages, 20 to 25 per cent.
 - Rice, 20 to 25 per cent.
 - Beans, white or colored, 20 to 25 per cent.
 - Starch, edible, 20 to 25 per cent.
 - Corn sirup, tins, 20 to 25 per cent.
 - Canned corn, peas, and tomatoes, standard grades, 25 to 30 per cent.
 - Canned salmon—chums, pink, and red, 25 to 30 per cent.
 - Canned sardines, domestic, 25 to 30 per cent.
 - Dried fruit, raisins, prunes, and peaches, 25 to 30 per cent.
 - Lard, pure leaf, bulk, 5 to 6 cents per pound.
 - Lard, pure leaf, tins, 18 to 22 per cent.
 - Lard substitutes, bulk, 5 to 6 cents per pound.
 - Lard substitutes, tins, 18 to 22 per cent.
 - Breakfast bacon, whole pieces, 6 to 7 cents per pound.
 - Heavy bacon, whole pieces, 5 to 6 cents per pound.
 - Hams, smoked, whole, 6 to 7 cents per pound. In quoting sliced ham and bacon add usual differential to cover actual shrinkage.
- By other special regulations the retailers' maximum margins have also been fixed in accordance with the following list:
- Potatoes, white or Irish, 25 to 30 per cent.
 - Onions, 25 to 30 per cent.
 - Eggs (whether sold in carton or not), 7 to 8 cents per dozen.
 - Butter, 6 to 7 cents per pound.
 - Butter substitutes, oleomargarine, nutmargarine, etc., 5 to 6 cents per pound.
 - Cheese—American, cheddars, twins, flats, daisies, long horns, and Y. A.'s, 7 to 8 cents per pound.

meeting at intervals in Washington. It might be said, in one sense, that the framework of food control, as of raw material control, was built upon agreements with the trade. The enforcement of the agreements once made, moreover, was intrusted in part to the co-operation of constituted trade organizations. The industry itself was made to feel responsible for the enforcement of all rules and regulations. Those agreements were frequently of an informal character and many of them were never written upon paper.

CAMPAIGNS OF EDUCATION FOR CONSUMERS.

The basis of all efforts toward control exercised by the Food Administration was the educational work which preceded and accompanied its measures of conservation and regulation. Mr. Hoover was committed thoroughly to the idea that the most effective method to control foods was to set every man, woman, and child in the country at the business of saving food. The fact, as he estimated, that 90 per cent of the ultimate food consumption of the country was in the hands of the women prompted him to lay before them rather full plans showing how to eliminate waste, reduce consumption, and introduce substitutes. The country was literally strewn with millions of pamphlets and leaflets designed to educate the people to the food situation. No war board at Washington was advertised as widely as the United States Food Administration. There were Food Administration insignia for the coat lapel, store window, the restaurant, the train, and the home. A real stigma was placed upon the person who was not loyal to Food Administration edicts through pressure by schools, churches, women's clubs, public libraries, merchants' associations, fraternal organizations, and other social groups. Each State had an educational director and a vast organization under him to propagate food policies. The historian of the Food Administration makes a unique attempt to estimate at the commercial value of the advertising which was given, generally gratis, to the propaganda of the Food Administration:

So spontaneous did the contributions of advertising become after the first few months that it has been impossible to keep any accurate account of the money value of the advertising which has been given to the Food Administration. From such records as have been kept, however, a conservative estimate approximates the sum of \$18,000,000. This record includes outdoor advertising by bulletin boards and the electrical displays, indoor advertising, as in railroad and street cars, space in periodicals, newspapers, and other such mediums, but is exclusive of moving-picture contributions, "Four minute" and other volunteer speakers, and other volunteers who would have ordinarily been paid for their services, among whom were American artists of national reputation.

The general policies set up by the Food Administrator, under the liberal powers given to the food-control act, were designed toward feeding the country and the Allies as nearly upon a prewar basis as

each situation would permit. The variations in general policy can be given a comprehensive analysis only under the particular commodity heads. The whole structure of food control rested in principle upon voluntary cooperation and agreement.

(3) THE ADMINISTRATION OF FOOD CONTROL.

The real skeleton upon which must hang any inquiry into the administration of food control is the license system which was given authority in law by the food-control act and around which was set up every regulation of the Food Administration. A documentary record, arranged in order of authority, of every rule of food control could be made by an examination of the food-control act, the presidential proclamations and Executive orders, the general license regulations and the special license regulations. The food-control act was the authority granted by Congress to the President to control foods, the presidential proclamations and Executive orders issued under that act created the Food Administration and proclaimed what persons and commodities were to be licensed, the general license regulations declared the rules and regulations set up by the Food Administration and made applicable to all licensees and licensed commodities, and the special license regulations declared the rules and regulations set up by the Food Administration and made applicable to particular licensees and particular licensed commodities. The tangible evidence, therefore, of all commodities that came under formal food control is to be found by following these links of the license system.

THE LICENSE SYSTEM AS THE BASIS OF CONTROL.

The Food Administration controlled foods during the war through its power to prescribe the conditions under which food dealers might operate. A review has already been made telling how the Food Administration, proclamation by proclamation, came into license control over very nearly the whole lot of food staples at wholesale.¹ Its license power lay in its right to grant or withdraw

¹A complete list of the Executive orders and proclamations, which extended Food Administration license control over the food group, was given in an earlier section of this chapter. These presidential proclamations drew increasing numbers of persons under license control until, on December 31, 1918, there were 263,737 firms, individuals, and corporations under license by the Food Administration. There follows an enumeration of those licenses by kind:

General licenses issued under the President's proclamation of Oct. 8, 1917, and supplemental proclamations.....	152, 100
Sugar licenses issued under the proclamation of Sept. 7, 1917.....	473
Bakers' licenses	38, 800
Salt-water fishermen's licenses.....	69, 218
Steamship bakers' licenses.....	1, 103
Near-beer manufacturers' licenses.....	377
Arsenic licenses.....	511
Coffee licenses.....	1, 155
Total	263, 737

licenses at discretion. It required, in the exercise of that power, that each licensee accede both to general and special regulations as a condition permitting him to do business.

The general license regulations, made applicable to all licensees, were gradually worked over and later condensed into a form compact enough to permit of ready analysis.¹ Reports were required from each licensee showing complete information regarding any commodities dealt in by him and filled out upon forms prepared by the Food Administration; all property and records were to be held open for inspection; speculation and the making of unreasonable profits were prohibited; licensees were forbidden to make sales to speculators or deal with persons violating the food-control act; secret rebates and resales within the same trade were prohibited, and so too were combination sales. The above general rules pertained to all licensees, with a provision that if there arose an inconsistency between a general rule and a special rule, the special rule should prevail.

The special license regulations, made applicable to particular classes of licensees, exceeded, of course, many times over in complexity and volume the more general requirements. The special requirements were in almost a whirl of modification all the while and seemed in policy constantly to be contradicting each other. Such a condition was by necessity the case, since the declared policy of the Food Administration was to meet each day the situation as it appeared that day. The special license regulations were made known in all manner of form—by press releases, by mimeographed sheets, by pamphlets, by printed loose-leaf inserts, and by notification to the Federal State food administrators. Some of them, for one reason or another, were never printed. The inevitable confusion which grew up within the trade and the Government as these regulations began to mass, gave necessity for the loose-leaf record of Food Administration rulings. That record, which was started well along in 1918, permitted of inserts daily as new rules supplanted or superseded old ones, and contains, presumably, all regulations made by the Food Administration. It is possible to assemble these rules into families of special-rule pamphlets, and that was generally done. The whole lot of special rules, including those that were printed in pamphlets and those that were not, comprises 28 separate groups.²

¹ The remarks that follow in the text are based upon the loose-leaf rules issued by the Food Administration pertaining to all licenses except salt-water fishermen.

² The pamphlets of special rules were numbered serially from II to XXVIII, as listed below. A pamphlet of general rules was issued as No. I in the serial.

- II. Wheat and Rye Elevators, Dealers, and Millers.
- III. Corn, Oats, Barley—Elevators, Dealers, and Millers.
- IV. Maltsters, Malt Dealers, and Near Beer Manufacturers.
- V. Rough Rice and Rice Millers.
- VI. Sugars, Sirups, and Molasses—Manufacturers and Refiners.
- VII. Cannery and Packers—Vegetables, Salmon, Sardines, Tuna, Milk.
- VIII. Dried Fruits, Packers.

The features and economic effects of food control can not be gleaned from a study of the special license regulations by chronological order of issuance. It is proposed, therefore, to rearrange those rules and discuss them as they pertained to distinct groups of foods. An analysis of license control within the whole food group is here made under the main divisions, wheat, flour, and bread; sugar; livestock and meats; poultry and dairy products; oleomargarine; cotton seed and cottonseed products; canned and dried foods; rice and rice flour; coarse grains and feed stuffs; coffee; and the collateral commodities, ammonia, ice, and arsenic. Some repetition will be found in the discussion of these various groups, but repetition is less objectionable than vagueness.

WHEAT, FLOUR, AND BREAD.

The wheat problem in the United States, which reached its climax in May, 1917, was not a local affair. It had its beginning in the Eastern Continent in 1914, and by the time it enveloped America it was a world problem of huge proportions.

The demands of Europe.—After nearly three years of war, western Europe was on short rations. Even in normal times the European countries do not produce enough wheat for food. They import large quantities from India, Australia, Argentina, Siberia, Russia, the Balkans, Canada, and the United States. The average annual importation for the three years preceding the war was approximately 550,000,000 bushels, of which about 100,000,000 bushels, including flour, were furnished by the United States.

Ordinarily the United States produces in the neighborhood of 800,000,000 bushels of wheat a year, and the domestic consumption is

-
- IX. Cotton Seed, Peanuts, Soya Beans, Copra, Palm Kernels, and Their Products.
 - X. Manufacturers of Lard Substitutes and Oleomargarine.
 - XI. Wholesalers, Jobbers, Importers, and Retailers of Nonperishable Food Commodities.
 - XII. Brokers and Auctioneers of Nonperishable Food Commodities.
 - XIII. Bakers.
 - XIV. Manufacturers of Miscellaneous Food Commodities.
 - (a) Products containing wheat or wheat flour, other than bakery products.
 - (b) Manufacturers and mixers of mixed flour.
 - (c) Sirup mixers.
 - XV. Fresh Fruits and Vegetables.
 - XVI. Fresh and Frozen Fish Distributors.
 - XVII. Salt Water Fishermen.
 - XVIII. Poultry.
 - XIX. Eggs.
 - XX. Butter.
 - XXI. Cheese.
 - XXII. Raw Milk.
 - XXIII. Meat Packers and Manufacturers of Lard—Distributors of Fresh Meats.
 - XXIV. Cold Storage Warehousemen.
 - XXV. Feedingstuffs.
 - XXVI. Tin and Other Containers.
 - XXVII. All Public Eating Places.
 - XXVIII. General Storage Warehousemen.

about 646,000,000 bushels. The 1917 harvest, at the time America entered the war, was estimated at 635,000,000 bushels, thus leaving a deficit of 11,000,000 bushels.

The Allies of Europe could not be satisfied, however, with anything but an extraordinary importation in 1917. For three years they had been engaged in the most destructive war in the world's history. Not only had their food requirements been increased but their production facilities had been diminished. At the same time, moreover, unrestricted submarine warfare had so reduced the Allied merchant fleets and so endangered world commerce that it was impracticable for any European nation to try to haul wheat over the long route from India or Australia or South America, especially when it was possible to buy in the United States. Siberian wheat was even less accessible than that of Australia, since the Russian port of Odessa had been shut off from western Europe by the closing of the Dardanelles. Thus in the spring of 1917 the United States was made the Mecca of Allied wheat buyers. The president of the Chicago Board of Trade stated that the largest buyers, both for cash and for future delivery, were the Governments of Europe. On the one hand, the vigor of buying by foreign agents had struck American markets like a tidal wave; on the other hand, the United States wheat crop, soon to be harvested, was shorter than it had been since 1911, and the supply would have been inadequate even during a normal year.

Another feature of the situation, and one which no doubt had more influence than any other, was that America had entered the World War. The psychological effect of war upon consumers who are capable of anticipating the performance of markets is well understood. A wild rush of buying seized America as well as the Allied Governments. From March to May, 1917, the price increased \$1 a bushel for No. 2 red winter wheat at Chicago, reaching an average for May of \$2.97. No. 1 Northern spring wheat averaged \$2.98¹ at Minneapolis for the month of May. This was the highest price in the history of America, being 50 per cent higher than the maximum during the Civil War.

The necessity for an increased world production.—The scarcity of available wheat had precipitated a panic. While fear was an element in the situation, the problem of scant supply was real. Increased world production was the effective remedy, and under existing conditions America was the country which must do most in increasing the world supply. Wildly fluctuating prices are not attractive to the American farmer, however, especially if they reach unusual heights at a season of the year when his crop is not ready for the market. A high price in May does not insure a high price at harvest time,

¹ Monthly average from weekly quotations in the Price Current Grain Reporter.

later on. Moreover, the problem of world supply of wheat, which became acute in the spring and summer of 1917, could not be alleviated except by sowing more wheat to be harvested one year later, or in the summer of 1918. Making wheat culture attractive to the farmer, therefore, became the task of the Government officials.

A minimum price for wheat fixed by statute.—Congress completed the food control act (Lever Act) 4 months after the United States had declared war against Germany, and it was approved by the President on August 10, 1917. This law not only made possible the organization and program of the Food Administration, but section 14 named a minimum price of \$2 per bushel for the 1918 wheat harvest under the act. Differentials were to be set up for the several standard grades of wheat, based upon No. 1 Northern spring wheat at Chicago, or its equivalent at the principal interior primary markets. The President was authorized, whenever he should find an emergency to exist requiring stimulation of the production of wheat, and whenever it seemed essential that the producers should have the benefit of the guaranty, to determine and fix what, under specified conditions, he considered a reasonable guaranteed price for wheat, in order to assure producers a reasonable profit.

It is quite evident that the authors of section 14 were concerned entirely with the producer. Production of wheat was the world's prime need, and the purpose of this guaranty was to serve notice upon the farmer one year in advance of his harvest that he might expect at least \$2 a bushel for his wheat crop, and as much more as the market should justify and the President provide.

It is of interest again to note that Congress did not name a price for any commodity other than wheat. It gave the President authority (sec. 25) to fix the price of coal, and (sec. 11) to purchase, to store, to provide storage facilities for, and to sell for cash at reasonable prices, wheat, flour, meal, beans, and potatoes, but, with the exception of wheat, no legislative price was fixed. Analysis of the food-control act leads to the conclusion that section 14 is not "part and parcel" of the original plan. Other sections, phrased in general terms, appear to anticipate problems or to confer blanket powers upon the President. In section 14, however, a specific problem is singled out and dealt with in a manner to insure interest in the production of wheat.

Two other sections of the act confer powers which were widely used in connection with the wheat price: Section 2, authorizing the President to enter into voluntary agreements for carrying out the purposes of the act, and section 5, providing, in effect:

That whenever the President shall find it essential to license the importation, manufacture, storage, or distribution of necessities in order to prevent unjust storage charge, commissions, profits, or practices he shall have such

authority. Furthermore he shall be empowered to determine what are fair profits, commissions, storage charges, etc., and may require licensees to govern their businesses according to his findings. A fine of \$5,000, or imprisonment for two years, or both, shall await the person who deals without a license or the licensee who violates the rules. Licenses may be revoked. Farmers, gardeners, associations of farmers and gardeners, and retailers whose gross sales do not equal \$100,000 per year, shall not be required to take out licenses.

Acting under the authority conferred by the food control act, the President and the Food Administration fixed maximum prices for a large number of foods, but wheat stands alone, among all the records of Government price control, as a minimum price fixed by legislative enactment.

The relation of the minimum price to the market price.—When the food control act became a law wheat was selling in Chicago for \$2.26 a bushel (average for month). The 1917 crop was moving to the markets. Congress had established a minimum price of \$2, but this would not be effective until 11 months had passed. This price, moreover, being below the prevailing market price, would not appeal especially to the wheat grower unless he should be informed what margin he might expect over and above the guaranteed minimum. Such information was to be forthcoming presently through the action of the President in establishing a definite price at a point above the minimum, but the immediate need was a stabilization of prices and conservation of supply during the 11 months to intervene before the legislative price should begin to operate.

What limit should be set upon wheat purchases for export? Considering the demoralized transportation facilities both on land and on sea, what was to prevent huge supplies of wheat from accumulating in the seaboard and interior terminals, later glutting the market and forcing the producers' price down? If satisfaction was not rendered to the wheat grower in 1917, when the problem was present, and real, and unprecedented, what was the use to promise him a fair price one year hence, when perhaps there might be no panicky situation?

Such considerations as these led the administration to fix a fair price for the 1917 wheat crop. Progress in this direction had been made even before the food control act became a law. On May 11, 1917, the Chicago Board of Trade had prohibited trading in May wheat futures, and had compelled the settlement of all outstanding contracts at \$3.18 a bushel. This first step in fixing an arbitrary price had stopped the wheat rise. About the same time representatives of the council of grain exchanges conferred with the Secretary of Agriculture concerning Government control of the wheat trade, and the committee of grain exchanges in aid of national defense, organized at that time, together with a committee from the

western exchanges, met with Mr. Hoover on May 16 and "at his request submitted a tentative outline of a plan of control." Under this plan the Government would control transportation of foodstuffs, fix a price for wheat and maintain it for the entire crop year without change, control the distribution of the available wheat supply, and control the storage facilities of elevators.

On August 14, only four days after Mr. Hoover was named Food Administrator, the President announced the appointment of a committee to determine a fair price at which wheat should be purchased by the Government.

The committee reported to the President on August 30, recommending that the price of No. 1 Northern spring wheat, or its equivalent at Chicago, be \$2.20 a bushel. Differentials were established for other grades and terminals. One paragraph of the report follows:

In reaching its conclusions, the committee has been guided by the principles you have announced, that a fair price should be based upon the cost of production for the entire country, plus a reasonable profit. We have relied upon the cost estimates for the crop of 1917 furnished by the United States Department of Agriculture, checked by the results of our independent investigations and the evidence submitted to the committee by producers and other representatives.

Upon receiving the report of the "fair price" committee, President Wilson announced this price immediately to the country. He said it would be rigidly adhered to by the Food Administration, and continued:

It is the hope and expectation of the Food Administration, and my own also, that this step will at once stabilize and keep within moderate bounds the price of wheat for all transactions throughout the present crop year, and in consequence the prices of flour and bread also. The food act has given large powers for the control of storage and exchange operations, and these powers will be fully exercised. An inevitable consequence will be that financial dealings can not follow their usual course. Whatever the advantages and disadvantages of the ordinary machinery of trade, it can not function well under such disturbed and abnormal conditions as now exist. In its place the Food Administration now fixed for its purchases a fair price, as recommended unanimously by a committee representative of all interests and all sections and believes that thereby it will eliminate speculation, make possible the conduct of every operation in the full light of day, maintain the publicly stated price for all, and through economies made possible by stabilization and control, better the position of consumers also.

Mr. Hoover, at his express wish, has taken no part in the deliberations of the committee on whose recommendation I determine the Government's fair price, nor has he in any way intimated an opinion regarding that price.

The Food Administration had made public its aims before the appointment of the fair-price committee: (1) To regulate trade so as to eliminate vicious speculation and to stabilize prices; (2) to guard exports; (3) to induce saving. A second statement soon followed to the effect that the Food Administration proposed to open agencies

for the purchase of wheat at all the principal terminals, carrying on its transactions through the regular dealers, and that it was prepared to take the whole harvest, if necessary, in order to maintain a fair price. Upon the announcement of the price of \$2.20, the Food Administration affirmed its intention "to use every authority given it under the food-control act and the control of exports to effect the universality of this fair basis throughout the whole of the 1917 harvest year without change or fluctuation."

The announced policy of the Food Administration makes evident the difference in point of view of the legislative and executive branches of the Government. Congress provided a minimum price for the 1918 wheat crop; the Food Administration adopted a definite "fair price" for the 1917 crop. The one was not to be effective for nearly a year, or until July 1, 1918; the other was effective from its announcement. The former was framed as an inducement to the producer; the latter was proposed to protect both the consumer and the producer.¹

On February 21, 1918, the President, by a proclamation, made the 1917 wheat prices applicable to the 1918 harvest, thus using his prerogative to raise the minimum price to any desired point above the \$2 minimum set by the Congress. By executive order of June 21, 1918, the price of wheat was raised to \$2.26 a bushel, the increase of 6 cents being granted to offset an increase in freight rates.

In passing, mention should be made of the Government operation of railroads. Freight charges are invariably included as cost items in calculating a Government "fair price" basis, and this would have been a more complicated question if railroads had been competing with each other.

The enforcement of the wheat price.—In the beginning, an indirect means had to be found to enforce the wheat price. Section 14 of the food-control act did not grant authority to fix a guaranteed price above the \$2 minimum, except for the purpose of increasing production, consequently this did not apply to the 1917 crop. Under section 2, however, the President could enter into voluntary agreements; under section 5 he could license and prescribe regulations for persons engaged in the importation, manufacture, storage, mining, or distri-

¹ The chairman of the milling division of the Food Administration says that the "fair" wheat price was neither a fixed price nor a maximum price; that Congress did not give authority for definite fixing of a wheat price, and that certain millers paid more for wheat than the price named by the fair-price committee. The principal millers of the country, however, entered into agreements with the Food Administration to the effect that they would not overbid the Government "fair price." The millers kept their agreements, the Food Administration Grain Corporation itself bought wheat at the "fair price," and the nonagreement millers who made payments in excess of the "fair price" were not strong enough to be serious menaces to the plan of Government price control. The "fair price" became in effect a maximum price as well as a stable price. This statement is borne out by the table of wheat prices on another page of this bulletin, as well as by the price tables in the separate bulletin on "Wheat and wheat products."

bution of any necessities; under section 10 he could requisition supplies needed for any public use; and under section 11 he could buy and sell wheat, flour, meal, beans, and potatoes.

Voluntary agreements had been made with the wheat and flour trades during the days of informal control, before the passage of the food-control act, and the continuation of this method, by virtue of section 2, seemed practical. Although the Food Administrator possessed an alternative in his announced intention to purchase the entire crop if necessary to maintain the "fair price," this course would have required an enormous amount of capital, and the administration preferred to interfere as little as necessary with the ordinary market activities. Unlimited exercise of the license power was a second alternative, and as time progressed this method was resorted to, but in the beginning the Food Administration did not realize how much authority it really possessed.

Little difficulty was encountered in effecting the voluntary agreements. The grain dealers, like thousands of other business men of the country, were willing to make any sacrifice necessary to win the war. The cooperative spirit of this group is shown by the following resolution adopted at a conference of over 100 representatives of the grain and elevator trades of the country held at the offices of the Food Administration August 15, 1917:

Realizing that the operation of Government control in wheats and rye is essential under present war influences in order to adequately protect our home supply and furnish our Allies with the aid we owe, and realizing that the establishment of an efficient Government plan of operation means to all of us curtailment of our business and to some of us actual retirement from active business during such period, we do express our pride in the character of service tendered by the grain trade in the sacrifice by these men of ability who are placing their experience and energy at the service of their Government, and that we approve the general plan of operation as explained to us to-day as being sound, workable, and necessary, and in its general lines it appears to us as being the most effective and just plan of operation which we can conceive.

The flour milling interests of the country also pledged themselves to take any steps, in regard to their industry, which might be found necessary for the winning of the war.

The Food Administration announced, therefore, that it expected to accomplish its objectives by voluntary cooperation. It had organized a Grain Corporation, headed by practical grain men, and through this corporation the buying was to be directed. Voluntary agreements were entered into between the flour mills on the one hand and the Food Administration and Grain Corporation on the other, to the effect that the mills should not pay more for wheat than the so-called "fair price." The Grain Corporation agreed to endeavor to supply millers with wheat on the basis of their average capacity, so far as the limitations of the 1917 harvest would permit.

Over 3,000 millers cooperated in the voluntary agreements. Up to November 27, 1917, the signed agreements received at the Food Administration offices represented five-sixths of the milling capacity of the country.

There were several inducements to the millers to enter into the agreements: (1) patriotic motives prompted them to assist the Government; (2) the milling division of the Food Administration was administered by millers, all of whom were serving without salaries; (3) the Grain Corporation, through the license powers explained below, controlled the wheat supplies of the country; (4) the Grain Corporation guaranteed the miller against loss by decline in value of the unsold wheat and flour; (5) the relative position of mills in the industry would be maintained; (6) the permissible profit of 25 cents a barrel for the manufacture of flour was attractive if it meant 25 cents net.

While it is true that some mills did not accede to the agreement, they were decidedly in the minority. Their operations, unless they were very small mills, were reasonably well controlled, moreover, by the license requirements which the Government promulgated even before it asked the millers formally to enter voluntary agreement.¹

Licensing millers and elevators.—President Wilson issued a proclamation on August 14, 1917, requiring storers and distributors of wheat and rye as well as persons manufacturing products of wheat or rye to procure licenses before September 1. Mills with a daily capacity of less than 100 barrels were exempted from this order. Effective November 1, another proclamation extended the license provision to all mills having a daily capacity of 75 barrels or over, and before February 15, 1918, every mill in the country was required to be licensed. Practically every rule which had been applied to the voluntary agreement mills was applied to the license mills with the exception that the latter were not forbidden to pay more than the "fair price" for wheat. This matter was taken care of in another way, nevertheless, for in regard to the limitation of the miller's profit to 25 cents per barrel on flour and 50 cents per ton on feed, it was specified that in calculating his cost items no miller should include more for the cost of wheat than the customary market price.

Under the license clause reasonable profits could be defined and unreasonable profits prohibited, and the license of any person could be revoked as a penalty for engaging in an unfair practice. This placed almost absolute power over certain industries in the hands of the Government, and after July, 1918, the Food Administration came to rely wholly upon this section of the law for its authority.

¹ A form letter explaining the voluntary agreement plan and asking for cooperation was sent out on Aug. 29, 1917, to such millers as had not already been reached through the millers' committee.

With the passing of the voluntary agreements, there was no definite price specified at which the elevators and mills should purchase wheat. In the absence of any prohibition to the contrary, it would seem that purchasers might have paid any price they desired. But the Food Administration had indirect means, as well as definite intentions, of maintaining the "fair price." It only stated that it would undertake to guard this price by buying wheat in the principal primary markets. Of course, the Government held a dominant position as the chief buyer in the market, and in case of necessity it could have taken the entire crop. Its indirect method, however, was simpler. This is explained fully under Flour Control, but the plan, in brief, was to fix a maximum price for flour at each mill, based upon the Government "fair price" for wheat. Thus if a miller paid more than the "fair price" for wheat, he would sacrifice his profit on flour, and if he tried to buy for less the Government would bid against him.

The 1919 guaranteed price.—President Wilson, by proclamation on September 22, 1918, extended the guaranteed price of \$2.26 for No. 1 Northern spring wheat at Chicago to the 1919 crop, if offered for sale before June 1, 1920. The termination of the war, even if officially announced by the President, was not to terminate any obligation accruing or accrued under this proclamation. This position was taken by the Food Administration, and was ratified by Congress and the President in providing and approving an appropriation of \$1,000,000,000 to make good the guaranty. This means that if the price of wheat goes down before June 1, 1920, the Government must pay to the wheat grower, out of the billion-dollar fund the difference between the market price and the guaranteed price.

Producers generally satisfied.—As harvest approached and the farmer observed a declining market on the strength of anticipated price regulation by the Government, he became fearful lest his interest would be overlooked. Why could wheat not sell as well for \$3 in September as in May? "Many farmers were discontented because they could not sell their entire crop at the high prices made by the uncontrolled influences which had dominated when the previous year's crop had been exhausted and the market was without any balance wheel. The crop was slow to move."¹ Farmers of Minnesota and the Dakotas at a conference August 26, 1917, advocated a Government fixed minimum price of \$3 a bushel. Agitation did not continue long, however, after the "fair price" was announced. The decline of flour prices to a level commensurate with wheat prices helped to put the farmer in a pacific mood. He also argued that since the wheat price was to remain stable for a year he could rush

¹ The Wheat and Flour Trade under Food Administration Control, by Wilfred Eldred. Quarterly Journal of Economics, November, 1918.

his oats to market and take care of his corn crop before selling his wheat. Then he found that even at \$2.20 he could realize more profit on wheat than had ever been the case before. His final estimate of the Government price, therefore, was conciliatory. Final determination of the farmer's attitude may be drawn from his acts in sowing more wheat. The acreage sown in the fall of 1916 was 40,534,000; in 1917 it was 42,301,000; and the preliminary estimate for 1918 was 49,261,000.¹

Stability of the wheat price a reality.—Reference to the wheat quotations in any terminal market will show an almost amazing stability of prices from August 30, 1917, when the "fair price" was announced, until after the armistice was signed in November, 1918. No. 2 Red Winter wheat in Chicago, for instance, varies only three-fourths of a cent from September, 1917, to the end of June, 1918.² It was June 21, 1918, that the President advanced the price 6 cents a bushel, and the July to November market price is seen to be from 6½ cents to 7⅞ cents above the June price. The Food Administration, therefore, did for wheat what it started out to do, and accomplished that result without resorting to the alternative of buying the entire crop.

Such effective control over wheat made possible a large measure of control over flour, even though no express authority was given by statute to fix flour prices. How this was accomplished will now be explained.

Close relation of flour and wheat.—The demand for wheat is almost entirely for flour manufacture. It is a custom with the flour market to fluctuate from day to day in conformity with wheat fluctuations. Even though a miller may have purchased his entire year's supply of wheat in September, the fluctuations of wheat during the following months will affect the price of this miller's flour. Flour prices are ordinarily based on the replacement value of wheat. This makes clear the flour problem in connection with the wheat problem in the spring of 1917. European demand for wheat was likewise a demand for flour. The short wheat crop was disastrous in that it meant a scarcity of flour, and the wild fluctuations in wheat prices were practically duplicated in flour quotations. When wheat was at its highest point in May of that year, having advanced \$1 a bushel in two months, flour was at the maximum of \$14.88 a barrel (monthly average), having risen from \$9.63 a barrel in March.

The flour shortage in the spring and summer of 1917 was partly due to fear on the part of the millers. They did not dare to stock up with wheat at the high prices then prevailing because if the Gov-

¹ Bureau of Crop Estimates, Department of Agriculture.

² See *Wheat and Wheat Products*, by Paul E. Peltason (W. I. B. Price Bulletin No. 9).

ernment should fix the price at a lower level they would lose heavily on their sales. It was aggravated, also, by the heavy buying of consumers early in the spring when prices were high and showing prospects of going higher.

Control exercised over flour.—The flour and wheat problems were attacked simultaneously by the Food Administration, but by different methods. Congress had not named a price for flour, nor had it given specific power to the President to do so. From the beginning the Food Administration took the ground that it had no authority to fix basic flour prices. With the price of wheat under control, however, and with authority to enter into voluntary agreements; to compel millers, distributors, and dealers to procure licenses, the conditions of which were drafted by the issuing party to the contract; to control business profits even to the extent of specifying what were reasonable profits; and to buy and sell flour for cash at reasonable prices, there could have been little question as to the control of the flour industry by the Food Administration.

At first the Food Administration adopted the voluntary agreement plan, but in connection with this it used its license power and its authority to determine fair profits. The right to buy and sell flour at reasonable prices was not used except in the cases of exports and of use by the Government or governmental agencies.

Voluntary agreements made with the millers in regard to the wheat trade applied also to the milling industry. This was true also of the license practices which have been explained in the wheat discussion above. One additional provision which applied only to flour was that profits must be limited to 25 cents a barrel.

Considerable difficulty was experienced in determining costs. To have accomplished this task completely would have required an army of auditors at work constantly on the monthly reports which millers were compelled to submit. But since the cost-plus method was to be followed in determining the selling price some uniform method of figuring costs must be adopted, and before November, 1917, the following rule had been presented to the mills:

In calculating profits the cost of flour, bulk, at the mill shall be determined as the cost of clean wheat used multiplied by the actual amount of wheat used (which in no event shall be in excess of 285 pounds of cleaned, 60 pounds per bushel, wheat to the barrel) less the amount secured from the sale of feed (excluding the profit derived from the sale of feed not to exceed 50 cents per ton as above) plus the actual proven cost of production (which shall not include interest to investment and marketing.)

In the fall of 1917, after the price of wheat under Government control became stabilized at a point much lower than had prevailed in the spring and summer markets the rush of milling was so great that many mills did not or could not reduce the price of flour fast enough

to keep profits within the margin of 25 cents a barrel. At the end of the crop year (June 30, 1918), and in some cases earlier than that date, those mills which had made profits above the maximum of 25 cents a barrel were compelled to return the surplus to the Government.¹

Other difficulties met in the operation of the cost-plus system were the padding of cost reports and the setting up of jobbing departments in some mills in order to get both a miller's profit and a jobber's profit on their product. Although this latter practice was permitted under the license rules, it proved to be most unsatisfactory.

By virtue of a presidential proclamation of October 8, 1917, all wholesalers and retailers doing a business of over \$100,000 a year were required to take out licenses prior to November 1. The purposes of the ruling were (1) to limit the prices charged by every licensee to a reasonable margin over expenses and forbid the acquisition of speculative profits from a rising market; (2) to keep all food commodities moving in as direct a line and with as little delay as practicable to the consumer; and (3) to limit, as far as practicable, contracts for future delivery. Hoarding and speculation were not permitted under these rules. Licensees were limited to a 30 days' supply and notice was served that a violation of the rules constituted cause for revoking the license as well as subjecting the offender to criminal penalties.

Control of flour in 1918.—The plan of controlling flour millers' margins was changed at the beginning of the 1918 crop year. Voluntary agreements with all flour mills were canceled as of June 29, 1918, and the Milling Division of the Food Administration went out of existence on June 30. Flour was to be controlled through a maximum "fair price" for the bulk product named f. o. b. mill at every producing point in the United States. This required the sending out of 8,500 individual price schedules, one to every licensed mill (which meant every mill) in the country. It was a physical impossibility to figure out this large number of schedules in time to get them to the mills on July 1, consequently there was an interim from July 1 until July 24 for which a substitute plan of price control had to be announced and enforced. For this period of slightly more than three weeks a bulk flour basic price was named at 56 milling points of the United States, and each mill, regardless of location, was permitted to put a sale price on bulk flour equal to the price at the nearest one of these 56 basic points, less freight to that city.

With the sending out of the maximum "fair price" schedules, effective July 24, 1918, a new era came in flour control. No longer

¹ At the present time (May 15, 1919) the Food Administration still has auditors in the field to check up expense items of mills. Although a few mills have retained their excess profits for two years, they will now be compelled to part with them.

was there an opportunity for padded cost reports. Not only had each mill been given a schedule showing the price of bulk flour at its door, but every State food administrator and zone agent had a copy of the schedule to assist him in enforcing this fair price. Maximum prices were in effect, with the Government naming each mill's maximum charge.

The bulk flour price for each mill was arrived at by taking the "fair price" of wheat at the nearest terminal, plus freight to the mill, plus \$1.10, called a conversion charge (to cover cost of milling and profit), minus the feed return.

For the guidance of the miller, there was issued a table of "Maximum permissible margins over bases on various classes of sale." When selling flour to one of the classes of customers on this table (and all classes were included) he might add to the schedule price the margin permitted for that class, plus items to cover freight and cost of sacks. In other words, he would make out a table like the following, showing:

Method of calculating maximum, delivered, fair price flour per barrel.

(a) Maximum fair price bulk mill as per schedule No. 000-----	\$10. 50
(b) Maximum differential, if any, on sale of class C-----	. 25
(c) Freight charge (including freight tax)-----	. 40
(d) Cost of sacks (98 pounds cotton for flour)-----	. 60
Total-----	11. 75

Also he must place on the contract a copy of the reasonable price schedule furnished his mill by the Food Administration. On the invoice form which must be executed in every sale of over 15 barrels of flour there must likewise be a copy of the reasonable price schedule and the flour charge items appearing under "Method of calculating invoice price."

These precautions and requirements made the flour-control plan a simple, self-policing system. If a dealer anywhere felt that a miller had charged too much for flour he could submit the records of his purchase to the nearest Federal food administrator or zone agent and learn immediately whether the "fair-price" rules had been violated.

After March 1, 1918, mills were permitted to make but one grade of flour (called 100 per cent straight). Two months previous to this date the quantity of wheat which they were allowed to use for a barrel of flour was reduced from 285 pounds to 264 pounds. All regulations, whether for millers, bakers, or dealers, were based upon the license power, which sanctioned the revocation of license in any case of disobedience.

Conservation measures.—Conservation measures, of course, went hand in hand with price control, for it was by inducing saving that

the Food Administration helped in some measure to offset the short supply of wheat and flour. At the outset reliance was placed upon voluntary conservation, stimulated by a wide-spread propaganda carried on by means of newspapers and billboards. The results were not satisfactory, however, and in January, 1918, President Wilson appealed to the people to reduce still further their consumption of food. About the same time the Food Administration issued rules, effective February 24, 1918, requiring bakers to mix substitutes with wheat flour in the ratio of 1 to 4, and after January 28 buyers at retail were required to purchase 1 pound of a substitute flour with every pound of wheat flour. Then by requisition 30 per cent, and later 45 per cent, of the output of the larger mills was taken between January and June, 1918, in order to get flour for export to the Allies.¹ It was only after the wheat flour substitute rule was applied that national saving was effective, the total consumption of wheat flour in the United States during the eight months from July 1, 1917, to February 28, 1918, being considerably in excess of the corresponding figures during the three years immediately preceding the war.²

Results of flour control.—Although the Food Administration disclaimed authority before July, 1918, to fix flour prices, market quotations show that the flour price was kept relatively lower than the wheat price. Only once during the period of Government control did the flour curve run up close to the wheat curve, and that was during July, 1918, after the Food Administration had abandoned the 1917 plan of control and before it had launched the 1918 plan. Considering that the wheat price was practically stationary throughout the price-control period; and that before June, 1917, the price of flour had frequently been above that of wheat, this accomplishment in price control bears testimony to the effectiveness of the Food Administration effort.

Further evidence of the success of flour control is gained from an examination of the flour market after the food regulations were discontinued. On December 19, 1918, the Food Administration announced that the public was no longer required to purchase wheat flour substitutes, and soon thereafter all flour regulations were abandoned. The effect is seen in market quotations. The January price rose 6½ cents a barrel, the February price 34 cents a barrel, and in March the price was \$1 a barrel higher than it had been at the signing of the armistice or for four months preceding that event.

Exercising bread control.—Bread is not as sensitive to ordinary market influences as are wheat and flour. When wheat and flour

¹ The Wheat and Flour Trade under Food Administration Control, by Wilfred Eldred.

² Estimates of United States Food Administration, Statistical Division, Information Service, Bulletin No. 1045.

were at the top of a runaway market in May, 1917, bread, which is the premier among all wheat and flour products, was climbing only one-third as fast as wheat and flour. It was not alarmingly scarce from day to day, and its advance was because of high cost of production rather than fear of a famine.

In order to prevent profiteering in bread, it was announced by presidential proclamation on November 7, 1917, that all bakers using as much as 10 barrels of flour a month must take out licenses before December 10. This regulation included hotels, restaurants, other public eating places, and clubs serving bread or other bakery products of their own baking. Before February 4, 1918, all unlicensed bakers using as much as three barrels of flour a month were required to procure licenses.

One of the first tasks attempted by the Baking Division of the Food Administration was to standardize the baker's bread of the country. By fixing the weight of the loaf at 1 pound minimum, with 1½, 2, and 4 pound loaves, and with a stabilized price for flour, it was anticipated that the variables in bread would be largely eliminated and competition would be centralized upon price. Loaves of other sizes were authorized later.

The Food Administration announced that it had no power to fix bread prices, but it could limit profits, determine fair profits, and issue regulations for its licensees. It curtailed the use of ingredients other than flour, yeast, and salt, reaffirmed an earlier request by the commercial economy committee of the Council of National Defense that the bakers refuse to receive returned bread and urged bakeries and stores to use as far as possible the "cash-and-carry" system.

No change was made in the policy not to fix bread prices, regulation being effected through the stabilization of flour prices and the control of bakers' profits. Rebates or discounts to favored customers were classed as unfair practices.

The Food Administration, acting under the license clause, could have in effect fixed maximum prices for bread, but this was not done. The power to revoke bakers' licenses was found sufficient to enforce the control desired. Occasionally other weapons were used, but the suspension of the license for a few days generally proved ample.

Results of bread control.—Licensing the bakers caused the bread price to decline 15 per cent in December, 1917. The price remained at this level (6.4 cents a pound loaf) for four months, after which it came up to 7.78 cents a loaf, or to a point 3 per cent above the price for the six months immediately preceding Government regulation of the baking industry. From March, 1918, until the close of hostilities in Europe the price remained at practically the same level. In other words, with the exception of one prominent decline when the Government first began to apply supervision, the price of bread

averaged somewhat higher after the bakers were licensed than it had been when wheat and flour were at their highest points in May, 1917.

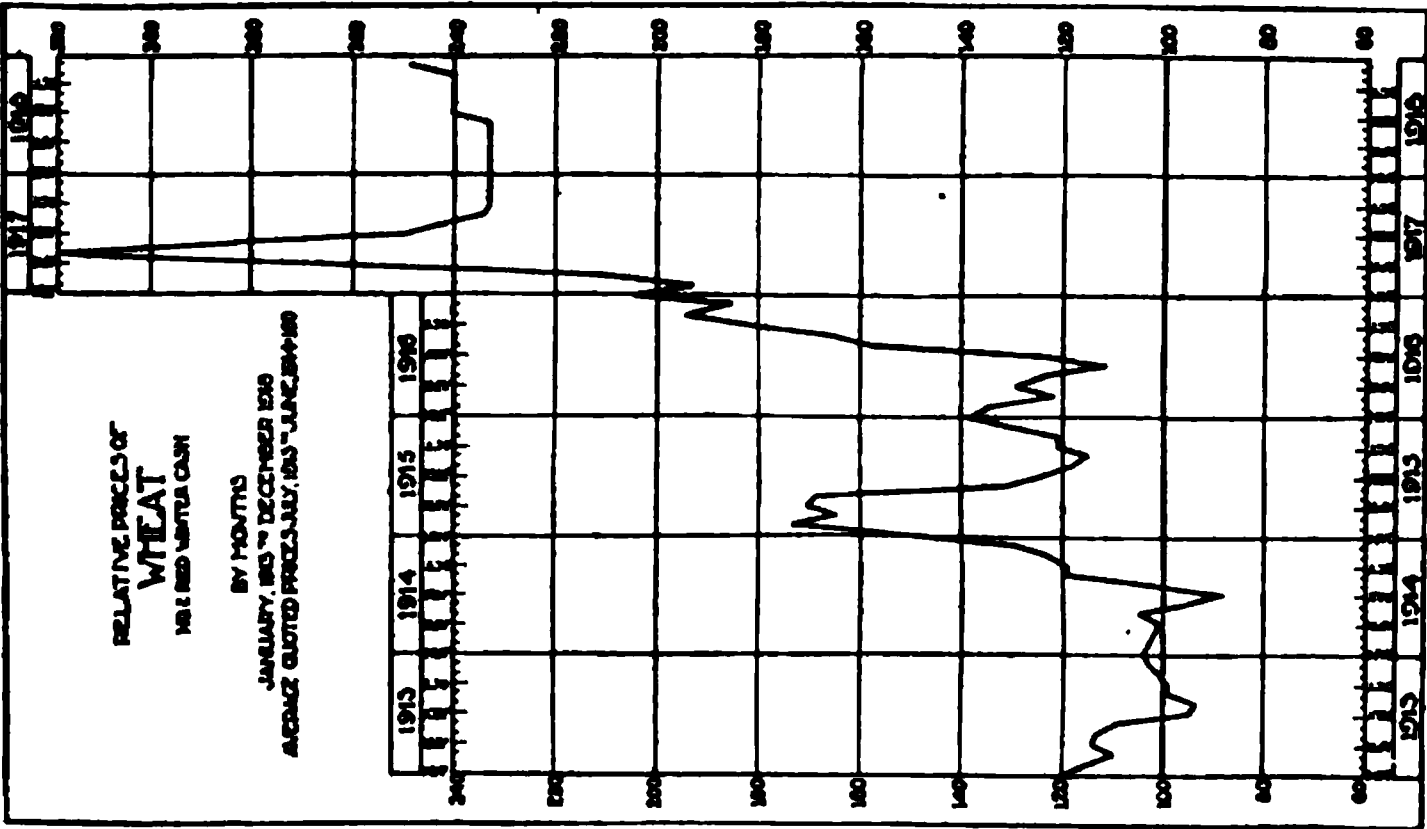
With the relaxation of Food Administration restrictions, about January 1, 1919, the bread price advanced to 8.5 cents, remaining at this figure during the first four months of 1919. Thus, as soon as the Food Administration influence was withdrawn, the price went up 11 per cent.

Summary.—Government control of prices as a war emergency measure took various forms in its relation to wheat, flour, and bread.

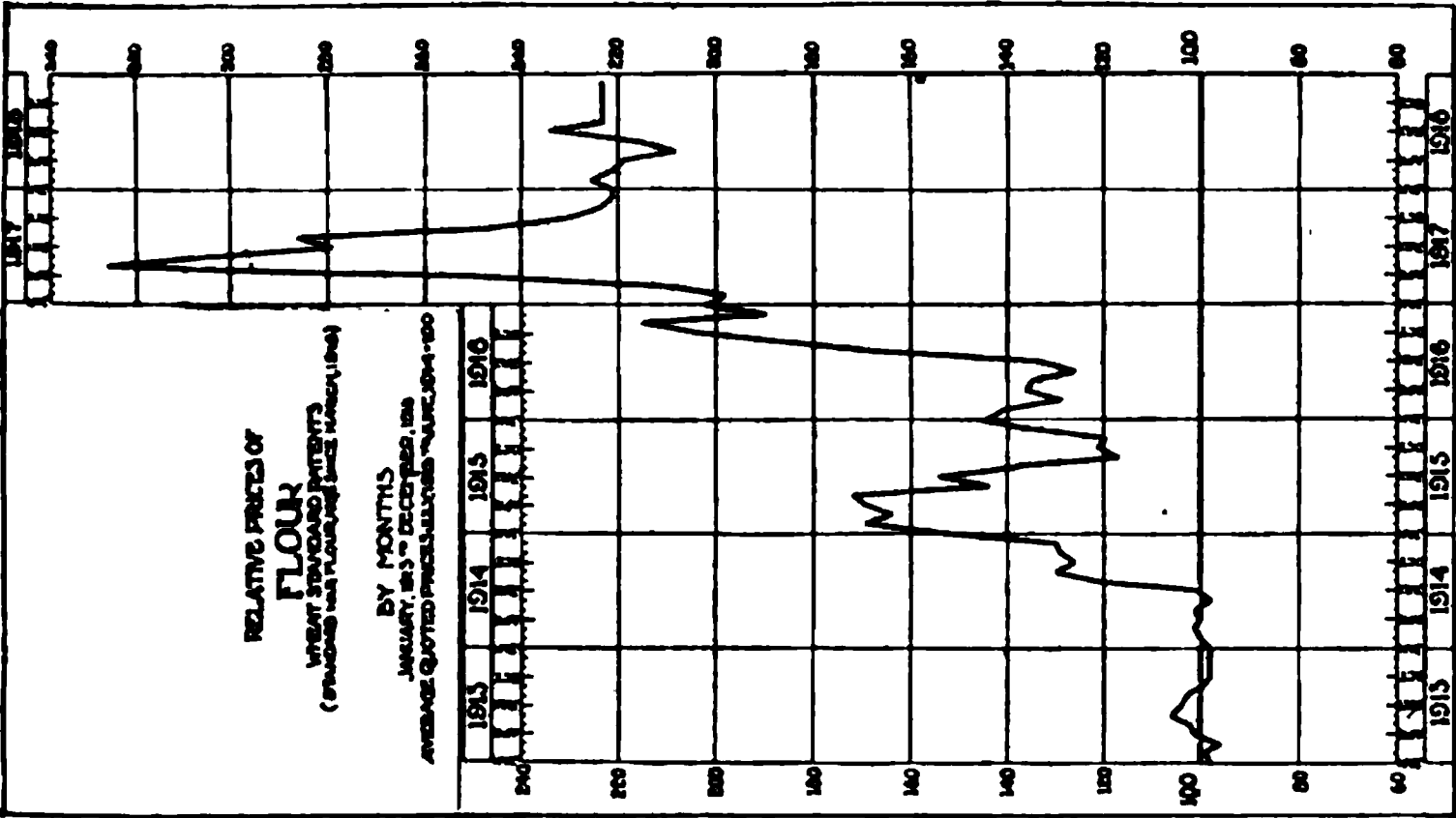
The wheat price originally was fixed by statute as a minimum price. A committee of the executive department then determined what would be a "fair price" (20 cents above the minimum), and this was announced and enforced as both a minimum and maximum price. It was practically an invariable price. In the beginning the price was maintained by means of voluntary agreements between the Food Administration on the one hand and the elevators and mills on the other. Ultimately the wheat price of \$2.26 a bushel at Chicago was treated merely as a "fair price," neither minimum nor maximum. The "fair price" was made practically absolute by fixing in July, 1918, a maximum fair price for flour at each mill, and basing the prices named in this maximum fair price schedule on the governmental "fair price" for wheat at the various interior primary markets, with allowances for freight to the milling point. During the first year of Food Administration history the price of flour was not fixed, but mills agreed to buy wheat only at the "fair price," and on the 1917 crop manufacturers' profits were limited to 25 cents a barrel on flour. Beginning July 24, 1918, a maximum fair price was enforced for flour. It was by virtue of the Government's power to issue and regulate trade licenses that this control was exercised. Prices were never fixed for bread. Control was exercised under the license power by limiting profits, preventing unfair practices, and standardizing the weight of the loaf.

The three charts presented here represent wholesale wheat, flour, and bread prices in Chicago, Minneapolis, and New York, respectively, from January 1, 1913, to December 31, 1918. These curves are made from relative prices on a comparable scale. It will be observed that the flour curve drops below the wheat curve soon after the passage of the food control act, and that it remains below throughout the period of Government control. It is not so regular as the wheat line, having a downward swing in the early months of 1918 and an abrupt ascent in July while a new plan of control was being held in abeyance. The two curves are similar, however, and far below the high points at the beginning of the war.

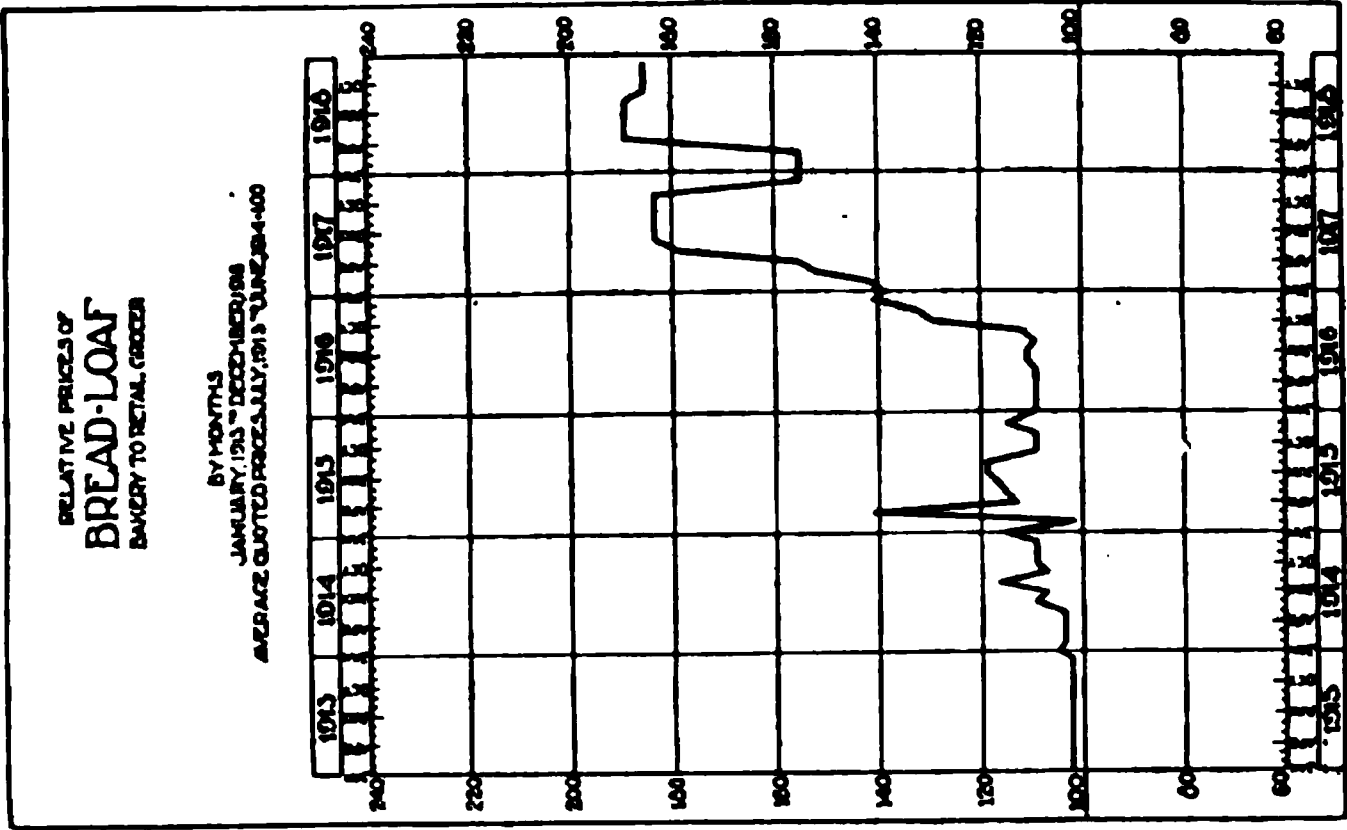
It is interesting to note that after the middle of 1916, flour, which is not a finished product, went up much faster and further than



Relative prices.—Wheat, No. 2 Red Winter, cash at Chicago.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



Relative prices.—Flour, wheat, standard patents, at Minneapolis.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



Relative prices.—Bread, loaf, bakery to retail grocer.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

bread. Furthermore, the advent of the Government as a price fixer for flour brought the curve down very decidedly, whereas bread, which was not subjected to price fixing, continued at a higher level than any point it had reached before, with the exception of four months immediately following the licensing of the bakers.

The accompanying tables show price increases immediately following the abandonment of food control. The wheat price, even though wheat was still under a minimum price guarantee, acted in like manner. It was stated above that it was by means of the maximum flour price and the method of calculating millers' costs that the price of wheat was kept from exceeding the fair-price level. Following the removal of flour regulations, wheat displayed some of the ordinary market traits during a season of short supply.

WHEAT, No. 2 RED WINTER, CASH, AT CHICAGO.

[\$0.9321 per bushel = 100.]

ACTUAL PRICE.

Date.	1913	1914	1915	1916	1917	1918	1919
Year.....	\$0.9888	\$1.0024	\$1.3119	\$1.3731	\$2.2779	\$2.2094	.....
Quarters:							
First.....	1.0774	.9596	1.5104	1.2270	1.9107	2.1700	.....
Second.....	1.0448	.9856	1.4627	1.1373	2.7136	2.1700	.....
Third.....	.8919	.9614	1.1111	1.3882	2.2608	2.2392	.....
Fourth.....	.9413	1.1532	1.1632	1.7400	2.1700	2.2582	.....
Months:							
January.....	1.1144	.9690	1.3910	1.2896	1.9024	2.1700	\$2.3788
February.....	1.0793	.9602	1.6091	1.2586	1.7989	2.1700	2.3450
March.....	1.0385	.9495	1.5311	1.1328	1.9781	2.1700	2.3575
April.....	1.0586	.9386	1.5016	1.2153	2.4672	2.1700	.....
May.....	1.0557	.9763	1.5700	1.1554	2.9705	2.1700	.....
June.....	1.0200	.8918	1.2265	1.0413	2.6388	2.1700	.....
July.....	.8836	.8210	1.1611	1.1597	2.3310	2.2470	.....
August.....	.8705	.9563	1.0963	1.4706	2.2563	2.2325	.....
September.....	.9216	1.1069	1.0760	1.5344	2.1775	2.2363	.....
October.....	.9216	1.1085	1.1325	1.6809	2.1700	2.2345	.....
November.....	.9447	1.1486	1.1250	1.8116	2.1700	2.2375	.....
December.....	.9575	1.2023	1.2322	1.7275	2.1700	2.3088	.....

RELATIVE PRICE.

	1913	1914	1915	1916	1917	1918	1919
Year.....	106	108	141	147	244	237	.....
Quarters:							
First.....	116	103	162	132	205	233	.....
Second.....	112	100	157	122	291	233	.....
Third.....	96	103	119	149	243	240	.....
Fourth.....	101	124	125	187	233	242	.....
Months:							
January.....	120	104	149	138	204	253	255
February.....	116	103	173	135	193	233	252
March.....	111	102	164	122	212	233	253
April.....	114	101	171	130	265	233	.....
May.....	113	105	168	124	319	233	.....
June.....	109	96	132	112	283	233	.....
July.....	95	88	125	124	250	241	.....
August.....	93	103	118	158	242	240	.....
September.....	99	119	115	165	234	240	.....
October.....	99	119	121	180	233	240	.....
November.....	101	123	121	194	233	240	.....
December.....	103	129	132	185	233	248	.....

FLOUR, WHEAT, STANDARD PATENTS, AT MINNEAPOLIS.

[\$4.5499 per barrel of 196 pounds=100.]

ACTUAL PRICE.

Date.	1913	1914	1915	1916	1917	1918	1919
Year.....	\$4. 5837	\$5. 0962	\$6. 6630	\$7. 2639	\$11. 3909	\$10. 1407	.....
Quarters:							
First.....	4. 4584	4. 5708	7. 3492	6. 3217	9. 2981	10. 1538	.....
Second.....	4. 7096	4. 5508	7. 3942	6. 0571	13. 5731	9. 7942	.....
Third.....	4. 6833	5. 3488	6. 2242	7. 8767	12. 3904	10. 3992	.....
Fourth.....	4. 4746	5. 8625	5. 7479	9. 2621	10. 3404	10. 2100	.....
Months:							
January.....	4. 4813	4. 5000	6. 8563	6. 6438	9. 2150	10. 0650	\$10. 2750
February.....	4. 5188	4. 5875	7. 7063	6. 4400	9. 0688	10. 3000	10. 5500
March.....	4. 3750	4. 6250	7. 4850	5. 8813	9. 6313	10. 0938	11. 2125
April.....	4. 6100	4. 5500	7. 7063	6. 2188	11. 6188	9. 9850	.....
May.....	4. 6563	4. 6125	7. 8813	6. 1900	14. 8800	9. 5250	.....
June.....	4. 8625	4. 4900	6. 5950	5. 7625	13. 8938	9. 8250	.....
July.....	4. 7700	4. 5938	7. 0313	6. 1000	12. 7500	10. 7120	.....
August.....	4. 7000	5. 5125	6. 3100	7. 6050	13. 0688	10. 2100	.....
September.....	4. 5800	5. 9400	5. 3313	8. 4250	11. 2625	10. 2100	.....
October.....	4. 4563	5. 7563	5. 5188	9. 2800	10. 6000	10. 2100	.....
November.....	4. 4875	5. 8813	5. 5000	9. 8250	10. 2250	10. 2100	.....
December.....	4. 4800	5. 9500	6. 2250	8. 6813	10. 1313	10. 2100	.....

RELATIVE PRICE.

Year.....	100	112	146	159	249	222	.....
Quarters:							
First.....	98	100	161	138	203	222	.....
Second.....	103	100	162	133	297	214	.....
Third.....	102	117	136	161	271	228	.....
Fourth.....	98	128	126	203	226	223	.....
Months:							
January.....	98	98	150	145	202	221	225
February.....	99	100	160	141	198	225	231
March.....	96	101	164	129	211	221	245
April.....	101	100	169	136	254	219	.....
May.....	102	101	172	135	326	208	.....
June.....	106	98	144	126	304	215	.....
July.....	104	101	154	133	279	234	.....
August.....	103	121	138	166	286	223	.....
September.....	100	130	117	184	246	223	.....
October.....	98	126	121	203	232	223	.....
November.....	98	129	120	215	224	223	.....
December.....	98	130	136	190	222	223	.....

BREAD, LOAF, AT NEW YORK.

[\$0.0412 per 16 ounces of unbaked dough=100.]

ACTUAL PRICE.

Date.	1913	1914	1915	1916	1917	1918	1919
Year.....	\$0. 0424	\$0. 0442	\$0. 0475	\$0. 0477	\$0. 0693	\$0. 0738	.....
Quarters:							
First.....	. 0424	. 0429	. 0492	. 0449	. 0593	. 0640	.....
Second.....	. 0424	. 0434	. 0474	. 0452	. 0710	. 0778	.....
Third.....	. 0424	. 0455	. 0478	. 0454	. 0753	. 0773	.....
Fourth.....	. 0424	. 0449	. 0457	. 0553	. 0715	. 0762	.....
Months:							
January.....	. 0424	. 0434	. 0474	. 0449	. 0571	. 0640	\$1. 0850
February.....	. 0424	. 0427	. 0420	. 0440	. 0582	. 0640	. 0850
March.....	. 0424	. 0427	. 0582	. 0449	. 0627	. 0640	. 0850
April.....	. 0424	. 0427	. 0465	. 0449	. 0640	. 0778	. 0850
May.....	. 0424	. 0427	. 0474	. 0449	. 0738	. 0778	.....
June.....	. 0424	. 0449	. 0483	. 0457	. 0753	. 0778	.....
July.....	. 0424	. 0441	. 0492	. 0457	. 0753	. 0778	.....
August.....	. 0424	. 0483	. 0492	. 0449	. 0753	. 0778	.....
September.....	. 0424	. 0441	. 0449	. 0457	. 0753	. 0762	.....
October.....	. 0424	. 0449	. 0449	. 0533	. 0753	. 0762	.....
November.....	. 0424	. 0449	. 0449	. 0545	. 0753	. 0762	.....
December.....	. 0424	. 0449	. 0474	. 0582	. 0640	. 0762	.....

BREAD, LOAF, AT NEW YORK—Continued.

RELATIVE PRICE.

Date.	1913	1914	1915	1916	1917	1918	1919
Year.....	103	106	115	115	168	179	.....
Quarters:							
First.....	103	104	119	109	144	155	.....
Second.....	103	105	115	109	172	189	.....
Third.....	103	107	115	110	183	187	.....
Fourth.....	103	109	111	124	173	185	.....
Months:							
January.....	103	105	115	109	139	155	206
February.....	103	104	102	109	141	155	206
March.....	103	104	141	109	152	155	206
April.....	103	104	113	109	155	189	206
May.....	103	104	115	109	179	189	.....
June.....	103	109	117	111	183	189	.....
July.....	103	107	119	111	183	189	.....
August.....	103	117	119	109	183	189	.....
September.....	103	107	109	111	183	185	.....
October.....	103	109	109	129	183	185	.....
November.....	103	109	109	132	183	185	.....
December.....	103	109	115	141	155	185	.....

SUGAR.

It might be supposed at first thought that the estimated world sugar supply of 18,659,792 tons for 1917, as against an average prewar production of 18,712,997 tons, was adequate enough not seriously to trouble the Food Administration. And, by comparison with the complexities of the wheat and meat control, perhaps, sugar control was less of a problem. But with these exceptions it was the most important of the food controls and affords an interesting and distinctive experience with price regulation. It was the cutting off of sugar from Germany, and the shortage of ships to distribute the available supply, which, more than a falling off in actual world production, made sugar control a problem.

The shutting off of German supplies from Great Britain and France, together with submarine ravages, had made these two countries dependent upon the Western Hemisphere for their sugar. By 1916 the largest part of the sugar consumed by the allied countries came from the United States and Cuba. The United Kingdom in that year, for example, took some 500,000 tons of sugar¹ from us and an equal amount from Cuba, whereas her normal receipts from both these sources combined had in the past averaged approximately 300,000 tons only. Moreover, the north European neutrals, and other countries in Asia, Africa, and South America, which had also been shut off from German and Austrian supplies, had entered western markets. Thus by 1916 our sugar exports had amounted to 1,630,000,000 pounds, which was approximately 3,000 per cent more than was shipped from the United States in the year preceding the outbreak of the world war. And yet, at the same time, due to lack of shipping space, large stocks were accumulating in Java.

This drain upon Cuban and American stocks was, of course, reflected in the market price of sugar, and by August, 1917, raw sugar

¹ Exports of sugar to the United Kingdom for the fiscal year ending June, 1916, amounted to 932,453,299 pounds, according to the figures of the United States Department of Commerce.

prices had reached a point 100 per cent higher than the average for the year preceding the outbreak of the world war.¹

It was thus evident, immediately upon the inauguration of the Food Administration, that measures must be taken to check the rise of sugar prices. Accordingly one of the first official acts of Mr. Hoover was the appointment on August 15 of Mr. George M. Rolph to head a Sugar Division. Three weeks later a presidential proclamation required all importers, manufacturers, and refiners of sugar, sugar sirups, and molasses to secure licenses from the Food Administration, and on October 1 virtually the entire sugar industry was brought under license control. Before the inauguration of the license system, however, steps had been taken toward fixing maximum producer's prices for sugar through voluntary agreement. The first of such agreements was arranged with the beet-sugar interests.

The beet-sugar control.—Mr. Hoover announced, as early as August 25, 1917, that the producers of beet sugar had agreed to sell their new crop at \$7.25 per hundredweight, cane basis, at refining points (Boston, New York, Philadelphia, Savannah, New Orleans,

¹ The effect of the shipping shortage, and the concentration of sugar demands upon the American and Cuban markets, upon sugar prices is presented in the appended table. The temporary rise in the summe of 1914 is to be explained by the large purchases of Great Britain following the declaration of hostilities, and by a panic among American consumers who rushed into the market and bought up large supplies because of a fear of shortage and higher prices. These prices were taken from Willett & Gray's Weekly Statistical Sugar Trade Journal.

United States price of raw and refined sugar, 1913-1918

RAW CANE SUGAR.

[96° centrifugal; duties paid at New York.]

Month.	1913	1914	1915	1916	1917	1918
January.....	\$0. 0353	\$0. 0332	\$0. 0305	\$0. 0465	\$0. 0524	\$0. 0601
February.....	. 0349	. 0344	. 0468	. 0491	. 0517	. 0601
March.....	. 0355	. 0298	. 0482	. 0564	. 0548	. 0601
April.....	. 0339	. 0298	. 0480	. 0616	. 0621	. 0601
May.....	. 0334	. 0326	. 0484	. 0643	. 0608	. 0601
June.....	. 0334	. 0334	. 0491	. 0632	. 0604	. 0602
July.....	. 0355	. 0328	. 0485	. 0630	. 0662	. 0606
August.....	. 0374	. 0570	. 0475	. 0558	. 0727	. 0606
September.....	. 0372	. 0580	. 0427	. 0555	. 0696	. 0697
October.....	. 0350	. 0446	. 0411	. 0626	. 0690	. 0728
November.....	. 0362	. 0391	. 0475	. 0621	. 0690	. 0728
December.....	. 0335	. 0396	. 0492	. 0631	. 0634	. 0728

REFINED CANE SUGAR.

[Fine granulated in bags or barrels at New York.]

January.....	\$0. 0450	\$0. 0392	\$0. 0488	\$0. 0573	\$0. 0662	\$0. 0744
February.....	. 0418	. 0392	. 0554	. 0597	. 0686	. 0730
March.....	. 0419	. 0382	. 0571	. 0657	. 0706	. 0730
April.....	. 0410	. 0372	. 0578	. 0706	. 0815	. 0730
May.....	. 0410	. 0397	. 0588	. 0746	. 0794	. 0730
June.....	. 0414	. 0417	. 0588	. 0736	. 0754	. 0731
July.....	. 0447	. 0420	. 0582	. 0750	. 0745	. 0735
August.....	. 0461	. 0649	. 0549	. 0700	. 0818	. 0735
September.....	. 0453	. 0690	. 0506	. 0637	. 0823	. 0845
October.....	. 0419	. 0593	. 0497	. 0708	. 0818	. 0882
November.....	. 0421	. 0493	. 0568	. 0735	. 0818	. 0882
December.....	. 0408	. 0483	. 0592	. 0692	. 0804	. 0882

and San Francisco).¹ This price was later raised to \$7.35 and \$7.45 on December 12 and January 8, respectively, in order that it might conform more nearly to the price of cane sugar, which was established by agreement with the Cuban producers, whose product is the basis for the price of the entire domestic sugar crop, including that from Hawaii and Porto Rico.

Shortly after the fixing of the beet-sugar prices by agreement it became evident that with the elimination of normal competitive methods of bidding for sugar supplies some arbitrary method of distribution would be necessary. Accordingly there was appointed a sugar distributing committee to allot the available sugar to dealers in various localities. Representatives of this committee were scattered throughout the country and prices at different distributing points were established by adding freight from the nearest seaboard refinery to the base price at that seaboard point.² It was hoped thus to effect an equitable distribution of sugar and a saving in freight costs. Cross shipments were eliminated wherever possible and, contrary to the usual custom of shipping sugar as much as half way across the continent, individual localities were supplied by the nearest refineries.

Control over the cane-sugar supply.—The regulation of the beet-sugar supply, however, could not of itself solve the sugar situation, for beet sugar represents a small part only of our total consumption. Cuba ordinarily furnishes the greater part of our sugar supplies, and it soon became necessary, therefore, to devise methods of controlling the price of Cuban sugar as well. That necessity was especially acute, for the Cuban supplies of raw sugar seemed too small even to meet our own demands. Moreover, the foreign Governments were bidding against each other and against the American refiners for these scanty supplies. Under such competition it was apparent sugar prices could not be kept stable. The entire sugar-refining industry agreed to keep out of the Cuban and other raw-sugar markets and to obtain their supplies through a purchasing body created by the Food Administration. This body, appointed on September 21, was the International Sugar Committee, formed by agreement with England, France, and Italy to arrange for the purchase and distribution of the available sugar for the allied Governments and for all allotments to neutrals. There was also appointed to cooperate with this international committee a committee of American refiners, whose business it was to allocate among our refiners all sugar set aside for the United States. This committee later became very active and had as its almost daily task the allotting to refiners of all sugar receipts

¹ It should be noted that this one is the first price-fixing agreement entered into directly by the United States Food Administration. The price of wheat had been fixed on Aug. 10 by congressional legislation.

² To the price of beet sugar at the seaboard refining points, i. e., \$7.25, the transportation cost to interior points was added.

from Cuba, Porto Rico, and other sources. In such a manner was competition in the world's sugar market eliminated and conditions made favorable for negotiating with the various producers for raw-sugar supplies.

The Food Administration, now in a position through the sugar committee to bargain with the cane producers for favorable prices, entered into an agreement with the Louisiana planters which resulted in the fixing of a price on October 23, 1917, for Louisiana raw sugar of \$6.35 per hundredweight at New Orleans. There having been fixed a price for beet sugar and the entire domestic production of cane sugar, it remained still to grapple with a more definite price control over Cuban cane sugar. The first move in this direction was the purchase by the International Sugar Committee of the small remainder of the old 1916-17 crop of Cuban sugar at \$6.75 delivered at New York duty paid and an attempt to secure the new crop, which was due the first of 1918. Accordingly, conferences were held with the Cuban producers in the hope of fixing a price for the Cuban crop. After a considerable delay, and the entrance of the Cuban Government and our State Department into the negotiations, an agreement was finally made on December 24 whereby three-fourths of, or (upon option) the entire new Cuban crop was to be sold to the International Sugar Committee at \$4.60 f. o. b. Cuban ports. That price, after adding freights, duty, and other costs, was equivalent to about \$6¹ f. o. b. New York.²

The Food Administration was thus instrumental in bringing all of the immediately available supplies of raw sugar under the control of the Allies. Further precautions were taken by placing embargoes, through the War Trade Board, upon the export of sugar from the United States, and by asking the Cuban Government to prohibit all shipments of sugar to any country other than the United States or her Allies.

The distribution of refined sugar.—Shortly after a price for the raw sugar supply had been decided upon, it was thought advisable to limit the costs of fabrication and distribution, in order that the ultimate cost to the consumer might be kept at a nominal level. For this purpose, the refiners were asked in September, 1917, to fix a margin between the cost of raw sugar and the selling price of refined sugar for which they were willing to operate. This refining margin, based on a prewar average, was placed at \$1.30 per 100 pounds. It was later, after investigation of refining costs by Mr. Oscar Straus,

¹ On June 24, 1918, the increased insurance rates caused by the presence of German submarines off the American coast caused a rise in the New York price to \$6.05.

² It is of interest to note that before making this final agreement with the Cuban producers, the United States Food Administration rendered aid both to the Cuban Government and the Cuban sugar industry, in order that the sugar crop might be more easily marketed. At the suggestion of the Food Administration, for example, the Cuban Government loaned to the Cuban Railway \$5,000,000 in order that the road might be put into better condition for handling the crop. The Food Administration also played an important part in getting some 50 American business firms, who had orders for supplies which were needed in harvesting the Cuban crops, to rush such supplies through and to fill orders for articles which the Cuban authorities were having difficulty to secure.

increased to \$1.45 per 100, effective August 1, 1918. This differential included, incidentally, a brokerage charge ranging from 3 to 5 cents per 100 pounds, which might be paid to agents for selling sugar to wholesalers and jobbers.¹ At the same time, the refiners agreed to confine their sales to certain limited territories.

With the price of sugar so minutely regulated in both its raw and refined state, it appears that the interests of the American consumer had been fairly well provided for. The licensing system limited the profits of the wholesaler and jobber to the prewar normal, which averaged about 25 cents per 100 pounds,² and the only remaining avenue of profiteering was the retail distributor. Methods of dealing with the latter have been discussed in previous pages.³

The Sugar Equalization Board.—No sooner had all arrangements been completed for the purchase and disposal of the 1917-18 sugar crops by the above committee and the Food Administration than it became necessary to provide for the crop of the year to follow. This was especially imperative, since the requirements of the Allies demanded the greatest possible stimulation both of cane and beet sugar production. If the estimate made in the late spring of 1918 that the United States would produce 1,600,000 tons of sugar was accurate, it meant that the balance of our 4,000,000-ton requirement must be imported. Cuba, of course, was the logical source to draw upon for this balance.

An investigation into the costs of producing sugar showed that the wholesale price of sugar could not be brought below 9 cents if the Louisiana cane producers and the western beet raisers were allowed a fair return.⁴ Accordingly, an agreement was entered into with the Louisiana cane producers, and the beet manufacturers, by which the wholesale price of sugar was stabilized at not to exceed 9 cents.⁵

It was known, however, that the Cuban raw sugar could be sold about 1½ cents per pound cheaper than our domestic supply and at the same time leave a good margin of profit. The price allowed to the American producer, then, if extended to the Cuban crop would have meant tremendous profits to the Cuban growers. On the other hand, if the American refiners were allowed to buy Cuban raw sugar at the price the Cubans were willing to accept, and forced to charge

¹ On Sept. 9, the refiner's margin was still further increased to \$1.54 per 100 pounds.

² This margin was increased in the midsummer of 1918 to 35 cents.

³ On Nov. 7, 1918, the retailer's margin on sugar was fixed at \$1.12 (bulk) and \$1 in packages.

⁴ This price was decided upon after various meetings with the producers held during the early summer of 1918. It should be repeated once more that the guiding motive in fixing prices by the Food Administration was the stimulation of production. The policy was to put the price at the point at which at least 90 per cent of the producers could secure a fair profit. The interests of the consumer were always considered, of course, and made the limiting factor in determining the price to be fixed. If every producer of sugar had been fully recompensed without consideration for the consuming public, the price of sugar would perhaps have been three times what it actually was during the war period.

⁵ The actual price fixed was \$0.0882. This price made raw sugar \$0.0728 per pound, to which the refiner's margin of \$0.0154 was added. It went into effect Sept. 9, 1918.

9 cents per pound for refined sugar (the agreed selling price for the sugar refined from domestic cane and beets), their profits would be far in excess of those ordinarily expected by refiners for their services. And, again, if Cuban sugar came into the United States at the price which the Cuban growers were willing to accept, and the American refiner's margin as determined earlier in the year was added thereto, and Cuban refined sugar was sold at a price considerably below 9 cents, the domestic cane and beet raising industry would be ruined and a shortage of sugar follow. A still further problem was that of equalizing the prices of the old-crop domestic sugars which were selling at \$7.30 per hundred pounds with those of the new 1918-19 crop which were soon to appear at the higher price of \$8.82.

The solution of these problems seemed to lie in some governmental form of equalization, whereby the existing differences in the costs of the domestic and imported sugars, as well as the differences between the old and new crop prices, would be eliminated. To attain this end, the United States Sugar Equalization Board was incorporated in July, 1918, with a capital stock of \$5,000,000, owned by the United States. The board, shortly after its incorporation, purchased all sugars produced from the 1917-18 crop, still in the country or in transit, at the old price of \$0.073 per pound, and immediately resold them to the same holders at the new price of \$0.0882. Thus the extra profit, which would otherwise have gone to the refiners who had purchased at the old price and would have sold at the new price, was absorbed by the Sugar Equalization Board.¹ In like manner the board bought up the entire Cuban 1918-19 crop at the price of \$0.0588 per pound (including costs and freight to Philadelphia and New York), and delivered it to American refiners on the Atlantic and Gulf coasts at \$0.0728 per pound. Adding to the latter price the refiner's margin of \$0.0154, this sugar could be sold in refined form at the same price as the domestic production, i. e., \$0.0882.

In the price of \$0.0728 to the refiner there was, after deducting duty and other costs, a margin of some 25 to 38 cents per 100 pounds. This amount instead of going to the Cuban producers or the American refiners went to the treasury of the Sugar Equalization Board. Thus the price of sugar was stabilized and the domestic industry preserved, while at the same time there went to the United States Treasury a considerable sum which would otherwise, in all probability, have gone to the American refiners or the Cuban producers.

¹ The question naturally arises, What provisions were made for the disposal of stocks held by wholesalers and retailers on Sept. 7, when the higher price went into effect, and which had been bought at the lower price prevailing prior to this rise? The Food Administration specifically stated that such dealers should continue to sell all lower-priced stocks on the lower basis until entirely disposed of. Even the averaging of the new and old price was prohibited. When considered from the standpoint of the individual dealer, the gains accruing from the rise in price were necessarily small, for their supplies of sugar were limited, the license regulations having prohibited them from holding more than a 60-day supply at any one time.

The limitation of sugar consumption.—The Food Administration, as well as the consuming public, learned shortly after the inauguration of the Sugar Division that control both of the sources of raw sugar and the prices of the finished product would not solve all the difficulties presented by the shipping shortage. There was, first, the railroad blockade which made next to impossible an equitable distribution, especially in the eastern section of the country. Secondly, the harvesting and marketing of the Cuban sugar crop begins about the first of the year and continues into the early summer. The Javan crop usually follows and fills in the void in receipts from June to October, when the beet-sugar crop begins to come in. The Louisiana crop first appears on the market in November and supplies our demand through the winter. The Javan crop was unattainable during the summer and autumn of 1917, however, and this, of course, added to the stringency. Moreover, the Atlantic coast refiners received considerably less Louisiana sugar than usual in late 1917, for the Louisiana planters were selling washed and clarified sugar which they made on their own plantations to manufacturers of confections. They had found that the selling of sugar in this semirefined state yielded them a larger profit than would have been secured for their products had they sold it in the raw state to the refiners.¹ Third, an early frost had perceptibly cut down the Louisiana supply; and, finally, the demands of our allies kept increasing more and more beyond expectations.

Limitation of consumption was, of course, the logical solution of this phase of the sugar problem, and in October, 1917, confectioners and manufacturers of nonessential foodstuffs were limited to 50 per cent of their normal requirements. Early in January, by reason of the new supplies from Cuba and Louisiana, this amount was increased to 80 per cent of normal requirements. It was later ruled "that such manufacturers starting operations after November 1, 1917, but before April 1, 1918, would be limited to 50 per cent, and that those starting after April 1, 1918, should be allotted no sugar whatever. Again, on July 1, 1918, all of the less essential industries were limited to 50 per cent. Beginning March 15, 1918, practically all manufacturers using sugar were required to obtain certificates from the Federal food administrators in their respective States.

¹ The shortage of sugar in the fall of 1917 resulted in the limiting of manufacturers of nonessential foods to 50 per cent of their normal sugar requirements. These manufacturers, however, could buy sirups, which they used as substitutes. Hence, rather than go without sufficient sugar, they were willing to pay to the Louisiana producers for washed and clarified sugar—which normally sold for about one-half cent per pound less than refined—the wholesale price of \$0.0765 per pound, or the agreed price for refined sugar (\$0.0635—Louisiana raw sugar price—plus \$0.013, refiner's margin). The Louisiana producers, on the other hand, were glad to sell this clarified and washed sugar at \$0.0765, for it netted them a larger profit than would have been secured had they sold it in the raw form to the refiners. This irregularity was later eliminated by fixing \$0.0725 less 2 per cent as the maximum price at which washed, clarified, and open sugar could be sold.

showing amounts that they were entitled to purchase,"¹ and these certificates were turned over to licensed wholesalers and other dealers when sugar purchases were made.

Consumption by the public in general was also closely regulated, and purchases were limited at first to 5 pounds at a time for urban and 10 pounds for rural customers. In June these rations were changed to 2 and 5 pounds, respectively, and retailers were forbidden to sell sugar to their customers in quantities greater than 3 pounds per person per month. Later they were further reduced to 2 pounds per person per month. On October 30, with the new crops in view and with improved railroad service, regulations were once more modified and the per capita allowance was restored to 3 pounds. On November 13 an allowance of 4 pounds was made and manufacturers were granted their full requirements. Finally, on November 27, 1918, all restrictions were repealed with but two very important exceptions, namely, first, price control was retained, through the operations of the equalization board, over its purchase of the Cuban 1918-19 sugar crop, until supplies were disposed of; and, secondly, a restriction of distribution by refiners to certain territories was retained in order to maintain an equitable supply for all parts of the country.²

Sugar by-products.—The distribution of sugar by-products, such as sirups and molasses, and the regulation of their prices were also administered by the Food Administration. Molasses and sirups were specifically mentioned in the license regulations of October and November, 1917, but only in a general way. Indeed, the early regulations affecting these by-products may be summed up in the requirement that they "be sold according to the customs of the trade in the various producing centers of the United States."

In March, 1918, control of the price of molasses was first inaugurated, and a maximum of 18 cents per gallon in tank cars at seaboard points was fixed for blackstrap molasses, either imported as such or produced in the United States from imported sugar cane.³ Shortly afterwards, in order that the largest possible sugar extraction might be gotten from the raw product, refiners were forbidden

¹ See "Sugar Prices and Distribution," by Roy G. Blakey, Quarterly Journal of Economics, August, 1918. Figures taken from the Sugar Market Review show that at least one-fourth of the sugar consumed in the United States goes to the manufacturer of confectionery and other sweet stuffs.

² There was also a considerable number of regulations, too numerous to mention in the limited space available, which indirectly affected sugar prices. An equitable distribution among customers was prescribed; only standard-sized packages could be used for packing sugar; stocks to be held by any one concern were limited; advance contracts were limited to a specified number of days, etc. See Series VI, Special License Regulations, Manufacturers and Refiners of Sugar; also Series I, Governing All Licenses for the Importation, Manufacture, Storage, and Distribution of Food Commodities and Feeds.

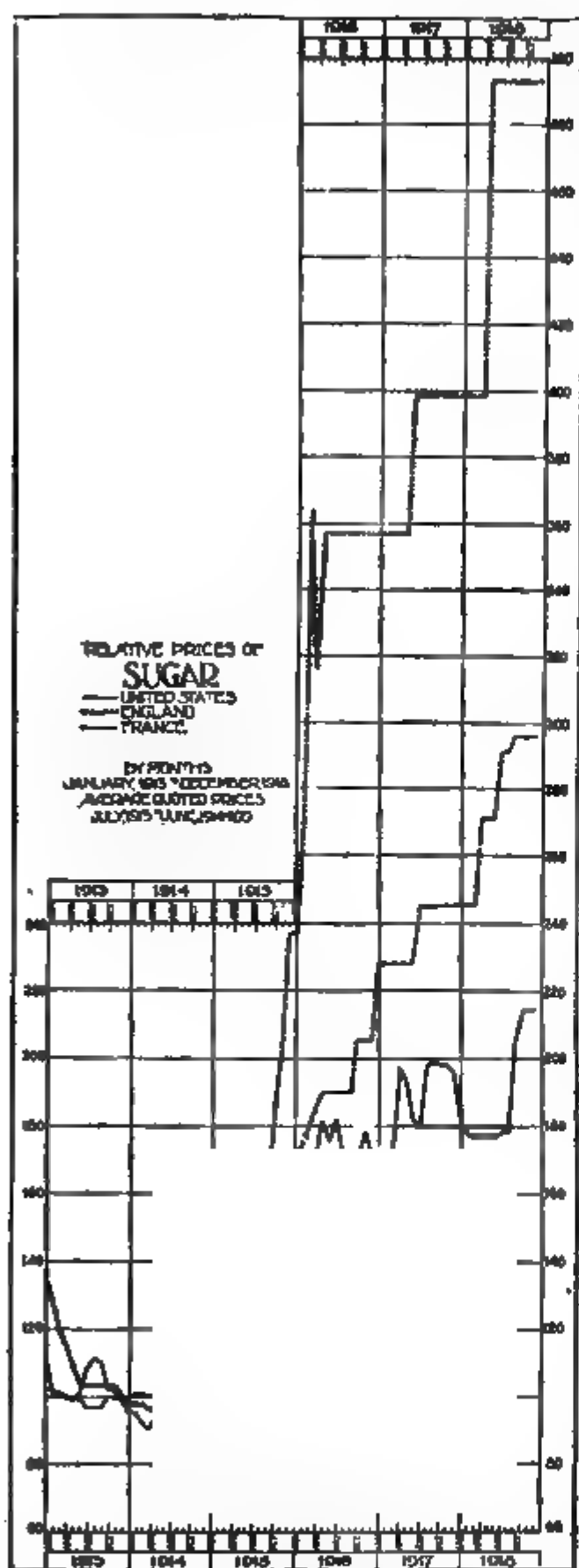
³ Beet molasses was also made subject to this fixed price in June. A maximum of 5 cents per gallon over the bulk price of 18 cents was permitted for barrel lots. The reselling price of wholesalers was also regulated by the Food Administration. A maximum margin of 8 to 10 per cent was fixed by the Food Administration on sales of molasses in barrels by wholesalers to retailers.

deliberately to produce sirups or molasses from which sugar could be commercially extracted. In June the price of sirups manufactured from imported raw cane

sugar was fixed at 50, 35, and 25 cents per gallon for high, medium, and low grades, respectively. Such prices were for lots purchased in bulk at primary markets. An added differential of 5 cents per gallon was allowed for sales of barrel lots.

A system of priorities was formulated for the distribution of sirups, and distributors could secure their needs only after furnishing a certificate of priority from the Food Administration showing the purpose for which the sirup was to be used. Molasses and sirups had to conform to certain specified standards and rules were laid down which regulated the method of shipping these products. These latter regulations were repealed on December 12, 1918, and on January 10, 1919, the regulation of the prices of molasses and sirups was withdrawn.

The results of sugar control.—One of the chief objections to price control made in the Senate sugar investigation of January, 1918, was that it kept down production. It would seem, if that be true, that the Food Administration was defeating its own end, which was the stimulation of production, by imposing fixed prices¹ upon raw sugar and its refined product. The policy of providing for the greater part



Relative prices.—Sugar: United States, England, France.—By months, January, 1913, to December, 1918. (Average quoted prices July, 1918, to June, 1919—100.)

of the producers when determining upon a price to be fixed, appears, after a review of the situation existing in late 1918, to have obviated largely this particular objection. For example, the total

¹ These prices, of course, were the results of voluntary agreements between the sugar producers and the Food Administration, as stated above.

domestic cane-sugar crop for 1918-19 (the first crop to be influenced by regulation) was estimated to be 21,000 tons larger than that of the preceding year. Moreover, the estimated output of the present Cuban crop was approximately 175,000 tons larger than that of 1917-18. To be sure, the domestic beet area of 1918 was some 15 per cent smaller than that of the year before, but this was due not so much to the regulated sugar price as to the higher prices of alternative crops and the ill feeling among the beet raisers against the sugar refiners.

Judging from the course of events in England and France, it might be supposed that the policy of the Food Administration had a considerable effect upon refined sugar prices. American wholesale sugar prices rose but 17 per cent from August, 1917, the month in which the Food Administration was inaugurated, to the signing of the armistice. French prices, on the other hand, rose 157 per cent in the like period, while in England an increase of 94 per cent was experienced. The course of sugar prices from January, 1913, to December, 1918, in the United States, England, and France is here presented graphically. The prices for each month have been reduced to a prewar basis, by allowing the average of the monthly prices for the year July, 1913, to June, 1914, to equal 100.

LIVE STOCK AND MEATS.

The devastation of a large part of the live-stock area of Europe, the shortage of fodder¹ and the resulting increase in the annual slaughter combined, in spite of a slight increase in the meat production in the United States,² to create a serious world shortage of meats and fats.³

¹ Mr. Herbert Hoover, in the fall of 1917 (Food Adm. Bull. No. 10), said in part:

"The general policy of European nations is to reduce these herds by slaughter of their animals to an extent far beyond their annual production. It is obvious that the number of their animals which it is necessary to support by imported fodder requires shipping for their support far in excess of the tonnage that would be required to import equal amounts of animal products. Furthermore, the production of fodder grains in Europe displaces, to a considerable extent, their possible production of bread grains."

² The decrease in the world's supply of meat-producing animals suffered during the first 3 years of the war as shown in Bulletin No. 10, U. S. F. A., was as follows:

Live stock.	Decrease under prewar normal in—		Total actual net decrease under pre- war normal.
	Western allies.	Other countries, including enemies.	
Cattle.....	8,420,000	26,750,000	28,080,000
Sheep.....	17,500,000	34,000,000	54,500,000
Hogs.....	7,100,000	31,600,000	32,425,000
Total.....	33,020,000	92,350,000	115,005,000

³ The French official live-stock figures, published by the Food Administration on Aug. 3, 1917, showed that their supply of cattle had decreased by 16.6 per cent as

For more than a year the Allies had been taking increasing quantities of meat and fats from the United States and already our exports of fresh and pickled beef had mounted to over 270,000,000 pounds for the year ending June 30, 1917, or an increase of almost 3,000 per cent over the prewar average. Similary, our exports of bacon and ham had increased some 640,000,000 pounds over the corresponding prewar yearly average of 303,489,000 pounds. It was apparent that these large demands would gradually absorb our domestic supplies, and, indeed, the report of a commission appointed by Mr. Hoover showed that such was fast becoming the case with our herds of swine.¹ But in spite of this situation it was necessary that future shipments to the Allies must equal, if not exceed, those of 1916-17. Accordingly, two methods were adopted for the solution of the meat problem—conservation through decreased consumption and stimulated production. These two courses of action guided the entire price policy of the Food Administration with respect to meat, and to them must be attributed its success or failure. The task of stimulating production was attempted through patriotic appeal and through an assured return to the producer. It is with the latter, since the medium of its realization was a form of price control, that the present investigation deals.

The stimulation of meat production.—The Food Administration through Mr. Hoover, and the Department of Agriculture through Secretary Houston, in a statement on August 21, 1917, urged the farmers of the United States to increase the production of sheep, cows, and hogs, assuring them at the same time “a fair share of a fair price paid by the consumer.” From the very beginning, however, Mr. Hoover insisted that he had no intention of fixing the price either of pork or beef, but that he hoped to increase the meat supply by stabilizing the industry and supporting remunerative prices to the farmer through purchases of beef and pork for export. The consumer, on the other hand, was to be protected by the elimination of speculative profits and the punishment of profiteering through a proposed license system.

There were in reality two quite different problems to be solved, the one pertaining to beef and the other hog production. The beef

compared with 1913, sheep by 33 per cent, and hogs by 38 per cent. These decreases, by the autumn of 1917, had increased by several per cent in the case both of sheep and hogs. The amount of meat passing through Smithfield Market, England's greatest meat distributing center, makes evident the extent of the meat shortage in England during the summer of 1917. The total receipts for July, 1917, equaled 20,802 tons as compared with 23,954 tons in the same month of 1916; 20,597 tons in 1915; and 36,720 tons in 1914. These data show a decrease of 43.3 per cent in the meat there handled in July, 1917, under that handled in July, 1914.

¹The reports of a commission to investigate the cost of producing hogs, Meat Division, United States Food Administration, 1917, states that: The normal number of hogs in the United States is approximately 65,000,000 as contrasted with the present supply of not more than 60,000,000.

problem was the less serious, for it seemed likely that the Allies could support themselves by further encroachment upon their herds. Future contingencies had to be provided for, however, since it was necessary to maintain the milk herds of the European countries. Of much more vital consequence, however, was the question of hog supply. Pork at the time played a tremendously important part in the food supply of the fighting armies, so great, in fact, that it was often said that should the United States discontinue pork exports, "the German line would be moved to the Atlantic seaboard."

Hog production.—The world demand for fats and the increasing consumption, both domestic and export, made the pork problem one of grave concern to the Food Administration. Yet, the ease of increasing production afforded hope of a rapid solution. The outstanding obstacle during the summer of 1917, curiously, was the lack of confidence among producers in the stability of market prices. It was evident that the farmers of the country would have to be assured that their efforts toward increased hog production would not entail loss. Accordingly, a commission was appointed to find out the actual costs of producing pork. The commission, composed of leading swine producers, investigated various phases of hog production and reported their results to Mr. Hoover on October 27. It was the opinion of the commission that the uncertainty on the part of producers, caused by the fluctuating market prices of live hogs, was leading to the marketing of large numbers of potential breeding stock. The continuance of that practice would obviously bring disastrous results. The commission declared it imperative to stabilize the market immediately, and suggested that a minimum emergency price be established. But it was also vital to stimulate swine production for 1917-18, and for this purpose it was recommended that a price, to go into effect on February 1, 1918, be announced for the 1918 litter. This price, it was believed should be based upon the price of corn. Observations had shown the average ration of corn to hog supply to be about 12 bushels of corn to 100 pounds of pork, and that as the ratio varied the stock of hogs in the country increased or fell off. It was mandatory, therefore, to maintain at least this ratio if a hog supply equal to that then existing was to be maintained. Indeed, the commission believed that in order to bring hog production back to normal a ratio of 13.3 to 1 would be necessary.

Two days after the receipt of these findings, the Meat Division of the Food Administration was created in Chicago under the general direction of Mr. John P. Cotton. Acting on the basis of the above report, he checked the fall in prices at the central markets by declaring that the price of hogs until further notice would not "go below \$15.50 per hundredweight for the average of the packer's droves on

the Chicago market.”¹ This price was to be maintained through the control which the Food Administration had over the buying of the Allies, the Army, the Navy, the Red Cross, the Belgian relief, and the neutrals,² which together constituted a considerable factor on the market. He further stated that, in order to stimulate the 1918 hog crop and bring it back to normal, the Food Administration would try to stabilize that price so that the farmer could “count on getting for each 100 pounds of hog ready for the market 13 times the average cost per bushel of the corn fed into the hogs.”

It should be borne in mind that this was not a guaranty on the part of the Food Administration. In fact, the Food Administration had no financial or statutory means of giving such a guarantee. It was merely a statement of intention and policy.

Close surveillance was kept by the Food Administration over the market after November 3 and methods were adopted to maintain prices in accordance with their outlined policy. In January, 1918, conditions became unfavorable. Prices had fallen to \$15.97.³ It appeared doubtful whether the Food Administration would be able to keep the market up to the \$15.50 basis. Accordingly, the Food Administration exerted all efforts toward securing orders and tided over the emergency. Prices for February, 1918, averaged \$16.55. There follows a table showing the average actual prices of corn, mixed, cash No. 3, at Chicago from January, 1913, to December, 1918, and those for live hogs, bulk of sales:

ACTUAL AVERAGE MONTHLY PRICES OF CORN AND HOGS AT CHICAGO, 1913-1918.⁴

CORN, MIXED, CASH NO. 3.
[Per bushel.]

Month.	1913	1914	1915	1916	1917	1918
January.....	\$0.4788	\$0.6175	\$0.7135	\$0.7500	\$0.9850	\$1.5975
February.....	.4891	.6169	.7325	.7375	.9950	1.6750
March.....	.4945	.6403	.7160	.7158	1.1243	1.6375
April.....	.5481	.6678	.7510	.7417	1.4722	1.5333
May.....	.5688	.6930	.7585	.7500	1.6466	1.4500
June.....	.6072	.7244	.7431	.7157	1.6921	1.4300
July.....	.6150	.7060	.7878	.7757	2.0478	1.5250
August.....	.7385	.8130	.8013	.8625	1.7917	1.6250
September.....	.7472	.7891	.7431	.8569	2.0681	1.5358
October.....	.6950	.7338	.6246	.9572	1.9944	1.2523
November.....	.7183	.6863	.6291	.9728	2.2500	1.2725
December.....	.6647	.6425	.6575	.9092	1.5935	1.4050

¹ Nov. 3, 1917.

² See statement on “The centralization of Government and Allied food purchasers” in the latter part of this chapter.

³ A survey of hog and corn prices from January, 1913, to December, 1918, throws considerable light upon the conditions in the pork industry. The advance in the price of hogs over the prewar average appears at first glance to have been considerable. It should be remembered, however, that corn is the chief fodder consumed in the raising of hogs and that the greater part of the cost of the matured animal represents corn costs. Corn prices during the period dealt with rose from a prewar (July 1, 1913, to June 30, 1914) average of \$0.679 per bushel to \$1.597 per bushel in January, 1918, an increase of 133 per cent, as against hog prices which rose from \$8.309 per hundredweight in the prewar year to \$15.975 per hundredweight in January, 1918, an increase of 91 per cent.

⁴ Quotations for corn, mixed, cash No. 3, are from the Daily Trade Bulletin, and those for live hogs (bulk of sales) from the Bureau of Crop Estimates, Department of Agriculture.

ACTUAL AVERAGE MONTHLY PRICES OF CORN AND HOGS AT CHICAGO,
1913-1918—Continued.

LIVE HOGS.

[Bulk of sales.]

[Per 100 pounds.]

Month.	1913	1914	1915	1916	1917	1918
January.....	\$7.4500	\$8.1750	\$6.8000	\$7.2500	\$10.8000	\$15.9750
February.....	8.1750	8.5500	6.6750	8.2500	12.4500	16.5500
March.....	9.1250	8.6000	6.7250	9.4500	14.3250	16.8750
April.....	8.8250	8.4750	7.2000	9.6250	15.6750	16.8500
May.....	8.5000	8.2375	7.4000	9.9500	15.9750	16.7750
June.....	8.6000	8.1000	7.4000	9.5750	15.1500	16.4250
July.....	9.0750	9.0000	7.1000	9.7250	15.2500	17.6250
August.....	8.3750	8.9000	6.9250	10.2250	17.2500	18.7500
September.....	8.3750	8.5750	7.3500	10.6000	18.2000	19.3750
October.....	8.2000	7.7750	7.7250	10.0500	17.1250	16.7500
November.....	7.8000	7.6250	6.6250	9.5750	16.9500	16.6250
December.....	7.7500	7.2000	6.3500	9.4250	17.0500	17.0000

The salutary effects of controlled purchases were apparent through the spring and summer of 1918. In August, however, receipts at the packing centers began to decrease, since the 1918 hog supply was late in maturing. The immediate consequence, of course, was a rising market, and hog prices went to \$18.75 in August and \$19.375 in September. But the interests of the consuming public demanded a limit to this upward rise, and lest it go beyond bounds the Food Administration once more assumed control of the market. On this occasion a reversal of the method used in the early months of the year was applied, and European orders, which were an important part of the then existing demand, were withheld.

Meanwhile, a subcommittee, the national agricultural advisory board, a body appointed in the early spring by Mr. Hoover and Secretary Houston to supervise live-stock production, had been considering methods to be further employed by the Food Administration in administering its policy of controlling hog prices. On September 25 this committee recommended that in placing orders for pork products the Food Administration require the packers with whom such orders were placed to agree to a definite price basis, determined in advance from month to month, for the purchase of their hogs, and that orders be based upon such an agreed price basis. It was also suggested that the Food Administration announce its intention of maintaining a minimum hog price of at least \$15.50 throughout the period of the war. Both recommendations were formulated into a definite policy at a meeting of the Food Administration with some 50 packers.¹ The latter agreed to maintain through the varying seasons, as far as possible, a \$15.56 minimum for average droves, as well as to maintain the October price on a basis of about 13 to 1, or an average of approxi-

¹ Oct. 4, 1918.

mately \$18.50. Attempts would also be made, they agreed, to prevent fluctuations of more than 50 cents per 100 pounds in any one week.

The pork situation seemed to be settled and producer and consumer had been provided for when peace talk became current. The fear of cheap Argentine and South African corn resulted in a considerable decline in corn prices,¹ which, it was feared, would break the hog market. Swine producers, anticipating a fall in price, rushed their stock to the market in large numbers, which action in itself was bound further to lower hog prices. Thus, while the supply of hogs had increased only 8 per cent over the supply of 1917, the arrival of hogs at the seven great markets during the first three weeks of October was 27 per cent larger than in the corresponding month of the previous year. The result, of course, was a failure to maintain the price basis agreed upon for October.²

The continued demands of the Allies and the prospective post-war requirements necessitated immediate remedying of the situation and a new basis of price determination was decided upon. The 13 to 1 standard was laid aside, and packers participating in Government orders agreed not to purchase hogs, during November, at less than a daily minimum price of \$17.50 per 100 pounds for the average of packers' droves; and further pledged themselves to buy no hogs other than "throw-outs"³ at less than \$16.50. But, if the plan was to succeed, it was necessary to take measures against a repetition of the experience of October. Supervision of markets, clearly, and measures looking to a regulation of the flow of hogs in accordance with the capacity of the packing houses at the various centers were equally essential. The execution of this task was assigned to a price-stabilization committee, composed of representatives of the Food Administration, Department of Agriculture, hog producers, and the packers. This committee kept closely in touch with the hog receipts at the various important markets and, through a system of embargoes and car allotments, controlled shipments. Receipts in excess of the capacity of slaughtering plants and the overstocking of primary markets were prevented, and thus the likelihood of a recurrence of certain earlier difficulties reduced.

Hog prices continued stable at about \$17.50 throughout November, and through agreement this price was continued through December,⁴ January, and February.

¹ See preceding table for corn prices.

² The influenza epidemic which curtailed pork consumption, and temporarily decreased the labor staff of the packers about 25 per cent, was another contributory factor in this connection.

³ "Throw-outs" were defined as pigs under 130 pounds, stags, boars, thin sows, and skips.

⁴ See preceding price table.

Beef production.—The regulations pertaining to the beef supply, by comparison with those for hog control, were few and simple. Upon the advice of the producers, no action was taken to stabilize beef in the fall of 1917, when the first investigations were made in anticipation of stabilizing hog prices. The control over beef prices was exercised almost entirely by regulating demand and supply, and there were never many or elaborate agreements dealing with the price of beef.

The military and allied demands for beef were considerably smaller than those for pork, and they were not sufficient in volume to exert more than a temporary influence on price. It was therefore impossible to apply to the beef market the same method of control that characterized pork control. Meatless days and meatless meals were instituted as a conservation measure at various times¹ and seemed to effect enormous savings. In fact, over 140,000,000 pounds of beef had been conserved in the four months ending February 28, 1918.² However, the rising price of feed stuffs and the falling tendency in the price of steers (the latter caused in part by the large seasonal flow of cattle to market) brought to the fore the question of cattle prices, and it was thought that measures similar to those taken in the case of hog producers would have to be applied to cattle raisers and feeders. On March 16 the Food Administration announced that it would attempt to relieve the cattle situation by increasing the proportion of its purchases of higher grades of beef. In early March the daily meatless meal request was withdrawn, and the only restriction asked of consumers was the beefless and porkless Tuesday. On March 30, the meatless day was entirely removed³ for a period of 30 days. The usual seasonal decline in the volume of animals coming to market began in early May and immediately became reflected in the market prices.

¹ The meatless day was inaugurated on Nov. 1, 1918. Every public eating place, as well as all families, were asked to pledge themselves to eat no meat on one day each week. On Jan. 28, 1918, President Wilson in a proclamation asked for further conservation of beef, pork, and mutton, and requested that "Tuesday be observed as meatless day in each week," and that "one meatless meal be observed in each day."

² The Food Administration on Feb. 22, 1918, in outlining the results of conservation in a press notice, said in part:

"From the 1st of November, when the meatless day was instituted, to the end of February the estimated slaughter of cattle in the United States will amount to a minimum of 3,800,000,000 pounds of beef. The export of beef to the Allies during this period will reach approximately 165,000,000 pounds. * * * The stocks of beef in the cold-storage warehouses will be approximately the same at the end of February that they were at the end of October. * * * The average prewar exports of beef for 4 months was about 25,000,000 pounds, and, therefore, the amount of conservation realized has been, roughly, 140,000,000 pounds."

³ Since the ostensible purpose of the "meatless day" was to conserve the supply and thereby provide sufficient meat for the Allies, the effect of such meatless days upon the

Further requests for conservation and economies in the use of meat were issued by the Food Administration.¹ But, in spite of economies, the war demands for beef remained far in excess of our surplus. The Food Administration was having difficulty in securing for overseas shipments the grades of beef most economical to ship. It was found necessary to reduce somewhat the desired weights and to postpone certain orders. On June 13, further economies were asked for, and several requests were made of households and public eating places to limit the weekly consumption of beef to certain specified amounts. Droughts in the Southwest, in Montana and adjacent States two months later, however, and the accompanying large runs of cattle to markets, made the continuance of beef conservation impracticable, and on August 15, 1918, requests for the conservation of beef were rescinded. The public was then asked to purchase cuts from light weight cattle, since these were being

price of live steers is of interest. The prices of steers at Chicago from 1913 to 1918 follow. Their trend from October, 1917, on is especially significant.

Prices of steers at Chicago, 1913-1918.

	1913	1914	1915	1916	1917	1918
Choice to prime:						
January.....	\$9.0125	\$9.2250	\$9.1585	\$9.4800	\$11.4100	\$13.7688
February.....	8.9125	9.2250	8.8938	9.2913	11.8628	13.7188
March.....	8.9400	9.2650	8.6667	9.6813	12.4500	13.8875
April.....	8.8938	9.2750	8.3313	9.7375	12.9900	16.0800
May.....	8.6563	9.1250	8.6450	10.0000	13.2438	17.4750
June.....	8.7800	9.1600	9.2688	11.0063	13.3625	17.8063
July.....	8.9875	9.6750	9.9063	10.7000	13.5300	18.1438
August.....	8.8875	10.0300	9.8100	10.5750	14.3188	18.6000
September.....	9.0750	10.5250	9.7313	10.8750	16.3375	19.2050
October.....	9.1250	10.4500	9.6875	10.9650	16.5150	19.1750
November.....	8.9563	10.2188	9.9400	11.5125	15.6063	19.4875
December.....	8.9200	9.7750	9.6875	11.5250	14.2250	19.8350
Good to choice:						
January.....	8.3563	8.7563	8.6333	8.6650	10.5300	13.1125
February.....	8.4063	8.6375	8.1750	8.4688	11.1313	13.0750
March.....	8.5600	8.6550	8.2333	8.9688	11.8680	13.2313
April.....	8.5000	8.7125	8.0313	9.1188	12.3100	15.1750
May.....	8.2563	8.7250	8.5900	9.4600	12.4750	16.4167
June.....	8.4850	8.7950	8.9663	10.2625	12.5500	17.1750
July.....	8.7188	9.2168	9.2125	9.9850	12.5600	17.6250
August.....	8.5063	9.6200	9.2300	9.8500	13.1750	17.8250
September.....	8.6650	9.7313	8.9500	9.8000	14.9873	18.4100
October.....	8.6500	9.4313	8.8750	9.9050	14.6750	17.8563
November.....	8.5063	9.4063	8.8450	10.3500	14.3875	18.1563
December.....	8.4450	8.9125	8.4875	10.2917	13.2350	18.3600
Native beef:						
January.....	7.9250	8.4700	8.2400	8.4060	10.1500	12.0250
February.....	8.0625	8.3125	7.5125	8.2125	10.4375	11.9625
March.....	8.2709	8.4375	7.7375	8.7250	11.0900	12.5400
April.....	8.2250	8.5000	7.6250	9.0500	11.7125	14.7000
May.....	8.0200	8.4300	8.2000	9.3625	11.6833	15.4375
June.....	8.2333	8.5625	8.7625	9.8000	12.1000	15.7500
July.....	8.2125	8.9250	9.2500	9.3760	12.4000	16.0375
August.....	8.2400	9.0100	9.0625	9.4125	12.5125	15.7600
September.....	8.4125	9.3500	8.9625	9.5600	13.0700	15.0500
October.....	8.4000	9.0800	8.8900	9.6125	11.7000	14.3750
November.....	8.2600	8.8333	8.7250	10.0075	11.1375	15.0200
December.....	8.2125	8.4375	8.4900	10.1100	11.1167	15.0500

¹ On May 3 a statement was issued to the effect that the Food Administration was desirous of securing economy in the consumption of all kinds of meats without the reinstallation of the meatless day. The public was asked rigorously to eliminate all waste and to reduce the consumption of all kinds of meats and poultry, more particularly beef. The substitution of milk products and fish was urged.

rushed upon the market from the drought-stricken areas.¹ From the midsummer of 1918, on to the signing of the armistice, no regulations directly affecting the price of live cattle were put into effect. On August 16, to be sure, the Food Administration announced a series of prices which it would pay for beef, September delivery, such prices to vary in accordance with the weights of dressed steers. But it appears that this plan proved impracticable, for four weeks later the method of purchasing beef was changed, and a new plan of purchasing beef on a basis of quality irrespective of weight was adopted.

The licensing of the meat industry.—Although the main instrument of price control over beef and pork was the regulation of the markets through purchases by the Food Administration, the regulation of profits and the general supervision over the activities of the packing industry was attained through the licensing system. Before availing itself of the license privilege the Food Administration called upon the packers for opinions and suggestions relative to the ways and means of control. The idea of placing the packing industry under license appears to have been generally approved, and on November 1, 1917, in accordance with President Wilson's proclamation of October 8 previous, the packing industry (i. e., "importers, producers, and packers of fresh, canned, or cured beef, pork, or mutton") became subject to license by the Food Administration.

Specific exception, however, was made of packers whose gross sales were less than \$100,000 per year. The latter were provided for, in part, under the license requirements for producers of lard and cooking fats² and by subsequent proclamations which included operators of stockyards,³ dealers in "live or dead cattle, sheep, swine, or goats,"⁴ and distributors and producers of animal fats and oils, and casings for sausages.⁵

The purpose of the licensing system was to reduce the cost of distribution from producer to consumer and to eliminate profiteering, and the general method of attaining this end was the prescribing of certain fixed margins of profit over cost. The packing industry, however, because of its complicated ramifications and the variety of by-products, was not readily amenable to this form of regulation. and other means soon were necessary for its control.

In determining the methods of regulation applicable, the packing industry divides itself naturally into three parts—the five great

¹ Compare the price tendency of "native beef steers, carload lots," in which the bulk of light weight cattle is included, with the price tendency of "heavy" and "corn fed" steers for July, August, and September.

² See presidential proclamation of Oct. 8, 1917.

³ See presidential proclamation of June 18, 1918.

⁴ See presidential proclamation of Sept. 6, 1918.

⁵ See presidential proclamation of Nov. 2, 1918.

packers whose individual annual sales exceed \$100,000,000; a considerable number of smaller packers whose sales each year are more than \$100,000; and, finally, packers whose annual business amounted to less than \$100,000.

Immediately after the establishment of the Meat Division of the Food Administration, regulations for the control of the meat industry were formulated. The outstanding feature of these regulations was the limitation upon profits which was partly made by fixing the return allowable on the capital invested in the case of the larger packers, and partly by prescribing a maximum return on gross sales in the case of the smaller.

Licensees with annual sales exceeding \$100,000,000.—So many and diverse are the activities of the modern, large packing plants that the industry may be said to consist of independent units which have little connection with each other. Many of the by-products, indeed, bear little relation to slaughtered live stock. Then there are connected with the packing industry such activities as the making of cartons and advertising materials which commonly comprise individual business units in themselves; as well as banks, stockyards, and the like, all of which to-day play an important part in plant operation. It was therefore necessary for the Food Administration arbitrarily to separate the industry into individual units for licensing purposes. Three divisions were made and different regulations promulgated for each.

Those activities directly connected with and incidental to the slaughtering of live stock and the products of slaughtered animals, as well as the preservation and shipping of meat products, were placed in class I, and profits from these activities limited to 9 per cent of the investment (including borrowed capital) per year, representing substantially the prewar returns.¹

A second class was made up of those branches of the packing industry which had to do with products (food or otherwise) which contained either in value or bulk few or no materials derived from slaughtered live stock. Highly fabricated by-products were also included in this class, and the annual profits were fixed at a maximum of 15 per cent of the investment. The raising, fattening, and feeding

¹ Immediately following the issuance of these regulations, a protest was made by the 5 large packers, their contention being that a maximum profit of 9 per cent might limit their borrowing capacity. They also stated that such a profit would not yield them sufficient to pay for the necessary expansion of plant and equipment and that no new capital would be found for this purpose during the war. Mr. Hoover appears to have allayed these fears by his statement that there could be no lack of confidence on the part of the banking community in the packer's earning capacity, especially since the export demand for their product was larger than the country's supply. He also said that if the packers "exhausted their abilities to find capital and exhausted their abilities for construction out of their earnings, and that if the Government required specific extensions of plant to meet war needs, these would be considered upon their merits from time to time."

of live stock; slaughtering and packing in foreign countries; the operation of banks and loan institutions dealing in futures; and investments in concerns not formerly treated as a department of a packing enterprise, however, were specifically exempted from the profit limitations.

Certain principles were applied to the determination of profits and investment. The latter was defined to include only those investments owned by the licensee and actually and necessarily used in his business, and was to consist of the actual investment in land, buildings, and equipment, the value of stocks held, and other especially designated factors. The same methods used in determining investment values in the year ending November 1, 1917, were to be applied to future valuations. The latter principle was also to be applied to the determination of profits during 1917-18, and provisions were made for depreciation of plants, repairs, and other items. It is significant that a special rule was incorporated prohibiting unreasonably large salaries or other compensations.

Licensees were required to close their books at least once in 10 weeks and report to the Food Administration any information requested by the Meat Division relative to investments, sales, and profits. In this way the Food Administration was enabled to watch closely the returns of the individual packers, and in order that reports might be verified, the individual licensees were compelled to give to representatives of the Meat Division access to all records and accounts. The Food Administration, however, was not content to rest even with this check. In order that every part of an individual packer's business might be supervised, it further required that it be given access to the books and records of every corporation, quite irrespective of the nature of its business, in which a licensee held half or more of the capital stock.

Licensees with annual sales of less than \$100,000,000.—The greater part of the licensed packers came within this category. Since there were not so many diversifications in these smaller plants, it was not deemed necessary to make the distinctions between various branches as was the case with the larger plants. Accordingly, the aggregate business of the licensee was taken as a unit and a maximum profit equal to $2\frac{1}{2}$ per cent of the gross value of sales was prescribed. Those activities, however, which were exempted from profit limitations as applied to the larger packers, as well as the operation of independent retail stores or markets, were to be excluded in computing sales. Accounting methods were regulated in a manner similar to those of the larger packers.

The administration of the license system over meat.—The inauguration of the license system did not remedy the many difficulties con-

fronting the Food Administration. The demands of the fighting forces were continually growing and, although the interests of the live-stock producers were under constant survey of the Meat Division, it was evident that many of the measures of the administration were "developing discontent and criticism in sections of the producing community."¹ Conditions had come to such a pass, in fact, that it was thought necessary to "study the entire situation in regard to the meat industry and the steps that should be taken in regard thereto."¹ On April 1, at the request of Mr. Hoover, a committee was appointed to determine a war policy respecting the meat industry.

An investigation of the situation resulted in no radical changes in administration. The continuation of regulations was recommended, as well as the bi-monthly auditing of the packers' profit returns, and the installation of uniform accounting methods by the Federal Trade Commission which had already been started. It was suggested that such maximum profit regulations as were then in effect should be continued until July 1, and that the Federal Trade Commission report upon the reasonableness of these maxima in the meantime. The packers, they recommended, should report to the Department of Agriculture, for publication in the market reports, the wholesale prices received for meat products and the transfer value of the principal by-products of their meat departments.

Among other plans suggested by the committee was the extension of the activities of the food purchase board, looking to a coordination of all official purchases of packing-house products. Such purchases ought, it was said, be made at prices sufficient to insure production and should be applied likewise to purchases of the public. The committee recommended, too, an investigation of the retail end of meat distribution and the control of refrigerator cars by the Railroad Administration.

The most important actual departure resulting from this investigation of the packing industry was the licensing of the stockyards. A presidential proclamation of June 18, 1918, required all operators of stockyards, all buyers, traders, and others who operated in connection with stockyards "to secure licenses on or before July 25, 1918." The supervision and regulation of these licensees were placed in the hands of the Department of Agriculture. A system of animal grading was immediately put into effect, and licensees were required to make daily reports of the distribution and destination of live stock, meats, and other products from the principal packing points.

The licensing in September of dealers in live or dead meat animals brought the meat industry under still further control. Four days

¹ See Mr. Hoover's letter to President Wilson, Mar. 26, 1918.

after the signing of the armistice manufacturers and distributors of sausage casings were licensed, and that regulatory measure was the final one imposed upon the packing industry, though it was also the first to be withdrawn.¹

The results of meat control.—American exports of beef prior to 1915 had reached their high point in 1906 and were of little consequence generally. Indeed, from 1906 on beef shipments to Europe declined, and by the fiscal year 1914 they had virtually terminated.² With the opening of the World War and the tremendous loss of other shipping American exports to Europe experienced a phenomenal rise, and the 12 months ending June, 1915, witnessed an increase of 2,700 per cent over the exports of the previous fiscal year. With the entrance of the United States into the ranks of the belligerents there was a still further increase in exports, which in the fiscal year 1918 reached 467,873,000 pounds.³

Pork exports, likewise in large demand by our European Allies, also increased considerably during the period of the war, and shipments in 1918 were about 360 per cent larger than those of 1914.⁴ This increase, indeed, is evidence of the Food Administration's success in its attempts to enlarge shipments of pork to the Allies. It is significant to note, despite the enormous increase in exports, that the hogs reported in the United States on January 1, 1919, numbered 75,587,000 as against 70,978,000 on the same date in 1918, and

¹ These licenses expired on Jan. 10, 1919.

² Exports to Europe of canned, fresh, pickled, and cured beef in the fiscal year ending June, 1906, equaled 413,865,267 pounds. By 1912 they had dwindled to 34,949,787 pounds, and in 1914 they were only 9,511,914 pounds.

³ The trend of beef exports is presented in the following table of shipments to Europe for the fiscal years 1915–1918. Data from the Bureau of Foreign and Domestic Commerce, United States Department of Commerce:

United States exports of canned, fresh, pickled, and cured beef to Europe, 1915–1918.

Fiscal year:	Pounds.
1914–15.....	257, 121, 000
1915–16.....	284, 797, 000
1916–17.....	271, 194, 000
1917–18.....	467, 873, 000

⁴ Below are presented the Department of Commerce figures showing exports of bacon, hams, and shoulders for the 5 years ending June, 1918. Although the relative increase for 1918 shipments as compared to 1914 is considerably smaller than in the case of beef, the actual increase in pounds is much greater, some 725,000,000 more pounds having been shipped in 1918 than in 1914.

United States exports of hog products to Europe, 1914–1918.

Product.	1913–14	1914–15	1915–16	1916–17	1917–18
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Bacon.....	166, 917, 000	331, 820, 000	524, 379, 000	531, 265, 000	750, 879, 000
Hams and shoulders.....	150, 717, 000	191, 110, 000	262, 878, 000	245, 328, 000	392, 000, 000
Total.....	317, 634, 000	512, 930, 000	787, 257, 000	776, 593, 000	1, 142, 879, 000

67,503,000 in January, 1917, while the hogs marketed in the year 1918 numbered 69,854,700 as compared with 57,483,800 in 1917.¹

The beef situation, in like manner, appears to have been radically changed during the past three years. The number of cattle slaughtered in 1918 totaled approximately 2,000,000 more than in 1917, representing a net increase of about 1,000,000,000 pounds of beef, while, at the same time, there were in the United States on January 1, 1919, more cattle than at any other time in the history of American agriculture.²

With the rescinding of the export regulations of the War Trade Board, pertaining to shipments of meat, in March, 1919, and the consequent opening of foreign markets to individual packers, the price agreements relative to hogs automatically went out of existence. The control of the market through purchases by the Food Administration was considerably diminished, with a resultant inability to keep up hog prices. Later events, however, showed price agreements to be no longer necessary, for within seven weeks after the removal of the embargo on private shipments the price of hogs reached \$21.15 per 100 pounds, the highest price ever known.

On April 1, 1919, importers, manufacturers, storers, and distributors of beef, pork, mutton, or lard were released from license requirements by Presidential proclamation, and the packing industry was freed from war-time control by the Food Administration.

¹ A detailed statistical review of the hog supply in the United States as of Jan. 1, from 1910 to 1919, is presented in the following table, prepared by the Bureau of Crop Estimates, U. S. Department of Agriculture.

Hogs in the United States, 1910-1919.

Year.	Total number.	Per cent of preceding year.	Year.	Total number.	Per cent of preceding year.
Jan. 1, 1910.....	*58,186,000	.....	Jan. 1, 1915.....	64,618,000	109.6
Jan. 1, 1911.....	65,620,000	112.8	Jan. 1, 1916.....	67,786,000	104.9
Jan. 1, 1912.....	65,410,000	99.7	Jan. 1, 1917.....	67,503,000	99.6
Jan. 1, 1913.....	61,178,000	93.5	Jan. 1, 1918.....	70,978,000	105.1
Jan. 1, 1914.....	58,933,000	96.3	Jan. 1, 1919.....	75,587,000	106.5

*Census Report of Numbers, Apr. 15, 1910.

² The number of cattle, excluding milch cows, in the United States at the first of the year, from 1910 to 1919, are presented below. (Data from Bureau of Crop Estimates.)

Cattle other than milch cows in the United States, 1910-1919.

Year.	Total number.	Per cent of preceding year.	Year.	Total number.	Per cent of preceding year.
Jan. 1, 1910.....	*41,178,000	.....	Jan. 1, 1915.....	37,067,000	103.4
Jan. 1, 1911.....	39,679,000	96.4	Jan. 1, 1916.....	39,812,000	107.4
Jan. 1, 1912.....	37,260,000	93.9	Jan. 1, 1917.....	41,689,000	104.7
Jan. 1, 1913.....	36,030,000	96.7	Jan. 1, 1918.....	44,112,000	105.8
Jan. 1, 1914.....	35,855,000	99.5	Jan. 1, 1919.....	44,399,000	100.7

*Census Report of Numbers, Apr. 15, 1910.

POULTRY AND DAIRY PRODUCTS.

The problem which faced the Food Administration in regard to poultry and dairy products was one of profit control strictly, and no definite price-fixing was adopted throughout the period of the Food Administration operation.

Poultry.—The perishable nature of fresh poultry made it virtually impossible to enforce any concrete price regulation. The greater part of the efforts of Food Administration was directed toward the prevention of hoarding and intertrading and to the elimination of all possible waste. Thus the early rules related to methods of shipping and feeding poultry, and specific regulations were issued as to methods of marketing. Licensees were instructed, for example, to keep their poultry moving to the consumer in as direct a manner as possible, and no resales were allowed within a given branch of the industry unless made at a price which was less than or equal to the initial cost to the seller.¹ Four classes of dealers in fresh poultry were recognized and only those sales were permitted which resulted in poultry following the normal movement from producer to consumer.²

The attractive market prices for poultry early in 1918, as well as the high cost of feed stuff, were persuading many poultry raisers to sell fowl, which, if kept, would have added to the spring and summer egg production. The idea of the Food Administration, however, was to keep on the farms those birds which would be egg layers in the months to follow, thereby increasing the production of eggs. In this way the available market supply could be enlarged and at the same time more eggs would go into storage during the season of high production at a price which would not necessitate unreasonable figures during the fall and winter. Accordingly, on February 11, 1918, an order of the Food Administration forbade licensees to ship, sell, or negotiate the sale of any live or freshly killed hens or pullets until April 30, 1918. The weather conditions of March and April brought about an early laying and hatching period, and by the middle of April the Food Administration lifted its restriction. It is estimated that at least 3,000,000 hens were saved in the New York, Chicago, and Boston markets alone.

The nature of the frozen-poultry industry allowed a much fuller control than was possible with fresh poultry, and there was accord-

¹ For a limited period sales between wholesalers in different cities were permitted at an advance of 5 per cent when such sales were necessary to supply the reasonable requirements of the buyer's business. In some cases 1 sale between dealers in the same branch of the trade was allowed, but more than 1 sale could not be made without the consent of the local food administrator.

² The classes so recognized were: Original packers and shippers, commission merchants and wholesalers, jobbers and suppliers of hotels and institutions, and retailers.

ingly inaugurated a fairly complete set of rules limiting the profits of the individual classes of distributors. The marketing of the fresh poultry which goes into the cold-storage warehouse is a highly seasonal affair, and the fowl producer was beyond the reach of the Food Administrator. It was, therefore, impossible to fix the price that the packer should pay for his poultry, and consequently the price which he should charge could not be fixed.

A maximum of 6 per cent was fixed as the advance over cost to be allowed to packers on sales of frozen poultry. This margin, however, applied only to regular sales within the trade—that is, sales to commission merchants, wholesalers, or jobbers. Many packers sell directly to retailers and to hotels, and in that way save the charges of middlemen. In recognition of the economic advantage of eliminating middlemen wherever possible, an additional advance of 10 per cent over the 6 per cent maximum mentioned above was allowed to packers who sold directly to retailers. To those who sold directly to hotels and institutions an additional advance of 15 per cent was permitted.¹

The return to commission merchants was limited to 5 per cent, as was also the case with wholesalers. However, in those cases where wholesalers also sold as jobbers, they were allowed a profit of 10 per cent over cost. Jobbers were permitted to sell their poultry at an advance of 10 per cent; and for suppliers of hotels and institutions there was set a maximum of 15 per cent.²

Eggs.—The regulations relating to cold-storage eggs, as with fresh eggs and fresh poultry, were similar to those for frozen poultry. The industry was divided into four parts and restrictions were enforced relative to intertrading,³ and a maximum return was prescribed on the sales of each branch.⁴

¹ The regulations as first issued said nothing as to extra margins allowed packers who sold directly to jobbers or to suppliers of hotels and institutions. An amendment of July 26, 1918, fixed the extra advance at 5 per cent, thus making the total return to packers who eliminated commission merchants or wholesalers in their transactions equal to 11 per cent.

² The organization of the trade, it is elsewhere shown, is such that poultry usually passes through four hands—(1) packers who sell to (2) commission merchants or wholesalers, who in turn dispose of their products to (3) jobbers or suppliers of hotels and institutions, and (4) retailers and hotels and institutions. Upon adding up the various returns allowed the individual branches of the trade, the total advance over the 6 per cent allowed the original packer amounted by the time frozen poultry reached the hands of the retailer, to 15 per cent; that is, 5 per cent to wholesalers or commission merchants and 10 per cent to jobbers. Packers selling directly to retailers, however, were only allowed an extra advance of 10 per cent, thereby saving 5 per cent in distributive costs. Similarly, when poultry went directly into the hands of suppliers of hotels and institutions a saving of 5 per cent was realized, the cost of distributing through the various hands being 20 per cent, as against 15 per cent when sold by the packer direct to hotels, etc.

³ An advance of 4 per cent was allowed on sales within the same branch of the trade, but such sales were limited to one in number for any lot of eggs. Local Federal food administrators had to be informed of such sales, as was also true of poultry.

⁴ Original packers storing in cold-storage warehouses were allowed a profit of 6 per cent over cost. When packers sold to retailers, an additional advance of 5 per cent over

Unlike the poultry regulations, however, provision was made for limiting the profits of licensed retailers, to whom were allowed maximum returns on candled and selected eggs of 15 per cent. This maximum was later changed by the Retail Section of the Distribution of Perishables to the definite sum of 7 cents for cash-and-carry stores and 8 cents for credit-and-delivery stores, and any advance over cost in excess of this amount was considered as a violation of the reasonable-advance-over-cost rule.

Butter.—The demand for fats in the war program led to the inclusion in the food-license proclamation of October 8, 1917, of manufacturers, dealers, brokers, and commission merchants in butter. The price of butter had previously shown no extraordinary fluctuation;¹ indeed, the price level of butter had risen more slowly than that of commodities in general. The primary aim of the Food Administration in this control, appears to have been the elimination of profiteering, since the regulations related in some way or other to the limiting of distributors' margins only. The costs of butter are so variable as to make impracticable any definite system of price regulation. In one instance, however, the price of butter was definitely fixed for a short while. Butter prices have a tendency to rise during the early winter months, and it was the desire of the food authorities to check, if possible, the usual rise during the emergency period.

On January 22, 1918, a scale of wholesale prices was established with the voluntary cooperation of the butter trade, and butter was fixed at 47 cents a pound at New York. At Chicago a price of 45½ cents was established for the last quarter of January, with the provision that beginning on February 1 the price be advanced one-fourth cent per pound on the 1st and 15th of each month until all the creamery butter then in storage should be released. These prices were but temporary and were enforced only for a period of several months, the time required for the release of the butter then in storage.²

For the purpose of enforcing the various regulations, butter was classified as fresh and cold storage, the latter term being applied to

cost could be charged if eggs were sold in original packages. If however, such eggs were candled before being sold, an additional advance of 10 per cent of cost was permitted. In selling candled eggs the actual net candling loss could be included in the cost, but the expense of labor and materials in candling and all repacking charges had to be omitted. Likewise an additional 12 per cent could be charged on sales to suppliers of hotels, etc. Commission merchants and wholesalers could sell cold-storage eggs at a maximum of 4 per cent over cost; jobbers at 5 per cent for cold-storage eggs and 10 per cent for candled eggs, while suppliers of hotels and institutions were permitted to take a profit of 12 per cent on either type.

¹By January, 1918, the wholesale price of butter had risen but 60 per cent above the prewar average, while the general price level had advanced approximately 85 per cent.

²It will be noted that prices were fixed only at New York and Chicago. It was thought unnecessary to fix prices at other points, since the principal butter exchanges were located in those two important centers. These exchanges had agreed to sell their butter at the established prices, and this was regarded as sufficient assurance that corresponding prices would rule throughout the country.

butter kept in cold storage for more than 30 days. No specific margins were designated for butter manufacturers as such, although all other dealers were limited as to the amount they could add to cost in making sales.¹

To dealers other than manufacturers or retailers there was permitted a margin over cost varying from 1 to 2½ cents per pound, depending upon the size of the sales made.² Commissions for sales by commission merchants were also limited, but charges so incurred could not be figured in determining costs.

It is of interest that during the first year of governmental regulation no specific statement was made in regard to prices to be charged by butter manufacturers selling their product to wholesalers or jobbers. To be sure, the Food Administration had a right to ask at any time for a report showing costs, margins charged, or any other information along such lines, and in this way prices were kept under control. In those cases where manufacturers sold as wholesalers or jobbers, eliminating the middleman, they were entitled to the margins allowed to wholesalers or jobbers. The significant point in this connection, however, was the method of determining costs, since the methods used for cold-storage butter was distinctly different from those used for the fresh variety. In the latter case only the cost of raw materials and the expense of manufacture were recognized; in the former the quotation "on the kind and grade of butter placed in cold storage, as quoted in a well-recognized commercial price current in the city, where and on the day when the goods [were] placed in storage" was to serve as the cost basis.³ Near the end of 1918, however, a definite margin was fixed for manufacturers of butter who sold their products to others than retailers.⁴

Retail dealers likewise were regulated as to their returns only at a late date, and to them was allowed an advance over cost of 6 cents

¹ As in all other cases, the reasonable-advance-over-cost rule was applied to the industry. Unlike the average foodstuff, however, the elements which could be included in the determination of costs were specifically stated in the regulations pertaining to butter. They were, first, purchase price; second, transportation charges; third, storage charges; fourth, insurance charges; fifth, interest on money invested at current rate while butter was in storage; and, sixth, actual cost of printing.

² The maximum margin was changed by the regulations of Sept. 19, 1918, to 3½ cents, which applied to sales of less than 100 pounds. Dealers carrying butter in cold storage more than 2 full calendar months could add to the permitted margin an extra cent per pound. For every calendar month in excess of 2, an additional quarter of a cent per pound was permitted, until a maximum of 2 cents was reached.

³ When there was no well-recognized daily price current in the city where the goods happened to be stored, permission was granted to use quotations given in a price current in the large market nearest the place of storage.

⁴ That is, manufacturers who sold their butter to wholesalers or jobbers, who in turn disposed of their goods to retailers, restaurants, hotels, etc. The margin for these manufacturers was set at 5 cents above the cost of the butter fat required to produce a pound of butter. In other words, "if the cost of butter fat was 50 cents per pound, and 8 pounds of butter fat were necessary to produce 10 pounds of butter, the cost of butter fat necessary to produce butter would be 40 cents per pound of butter (manufactured) and the maximum selling price for the manufacturer would be 45 cents."

per pound to cash-and-carry stores, and 7 cents per pound for stores extending credit and delivery. The addition of an extra margin for butter kept in storage which was guaranteed to other dealers was also allowed to retailers.

Cheese.—The prices of cheese follow closely the general tendencies of butter, and since the two industries show considerable likeness, the Food Administration adopted regulations for the cheese industry which were very similar to those for the butter industry. No definite return was established for the manufacturer of cheese, and his profits were kept in check under the reasonable advance regulation.¹

Dealers were limited in the advances permitted over the cost of their product, and like the margins allowed in the butter industry, these margins varied with the size of the sales.² Retail margins, too, were fixed and a maximum profit of 7 cents per pound over cost was allowed to cash-and-carry stores, while an advance of 8 cents per pound over cost was permitted to stores which extended credit and delivery.

Milk.—With feed stuffs in July, 1917, selling at a level 118 per cent higher than during the prewar year,³ and cows for slaughter averaging about 50 per cent⁴ more than the average peace-time price, it was to be expected that milk, too, would rise in proportion. But, curiously, the price of milk remained relatively stable,⁵ and July, 1917, found the wholesale price of fresh milk in New York but \$0.0498 per quart, or approximately 7 per cent above the prewar average.

It was but natural, then, that a demand for increased milk prices should arise among milk producers, and at the time of the organization of the Food Administration a general movement in that direction had already begun. The milk distributor, as well as the pro-

¹ Exact margins were not fixed at a later date for producers of cheese as they were for butter. However, a provision was adopted which outlined two ways of determining the cost of a supply of cheese for the manufacturer, who also sold as a wholesaler or jobber and who wished to secure the benefits of such margins as were allowed to the middlemen. Costs under such circumstances could be figured, first, by computing the cost of the raw material and the expense of manufacture; or, secondly, by considering as cost the price for the cheese to be sold in the primary market during the 10 days following the day of manufacture. (This latter method applied only to the determination of the cost of American or cheddar cheese.)

² Certain advances over cost were established for the individual types of cheese. Margins for American or cheddar cheese, for example, ranged from three-fourths to 3½ cents per pound; those for round or tub Swiss cheese from 1½ to 8 cents per pound. Dealers in block Swiss cheese were allowed from 1 to 4½ cents per pound; while brick, Limburger, and Munster cheese could be sold at a maximum advance, which ranged from 1½ to 3½ cents.

³ See "Prices of Feed and Forage," by Lloyd W. Maxwell (W. I. B. Price Bulletin No. 8).

⁴ See "Prices of Live Stock, Meats, and Fats," by Wm. A. Barber (W. I. B. Price Bulletin No. 20).

⁵ The price of milk, of course, is subject to extreme seasonal fluctuation, but as prices so it may be said that the milk situation was quite unaffected by the general upheaval which characterized prices in general. Milk in New York, to be sure, in 1916, had sold

ducer, played an important part in price revisions, and he, too, was asking for increased prices because of increased labor costs, overhead charges, and other necessities. While both the aforementioned, however, demanded an increased price, each appears to have doubted the necessity of an increase for the other. Distributors on the one hand objected to the raising of prices by producers, and producers on the other hand protested against the demand of distributors.¹

as high as \$0.0523 per quart (November and December), or about 50 per cent above the level of the prewar year; but this price, it should be borne in mind, was temporary and should be compared with the average price of \$0.0388 for the year.

A more detailed picture of milk prices can be obtained from the following table:

Milk (per quart), grade B, New York.

Month.	1913	1914	1915	1916	1917	1918
January.....	\$0.0375	\$0.0400	\$0.0413	\$0.0413	\$0.0513	\$0.0908
February.....	.0375	.0375	.0393	.0400	.0500	.0770
March.....	.0350	.0350	.0375	.0375	.0490	.0745
April.....	.0333	.0325	.0325	.0325	.0488	.0500
May.....	.0300	.0266	.0275	.0300	.0478	.0583
June.....	.0275	.0275	.0275	.0275	.0455	.0443
July.....	.0300	.0300	.0300	.0313	.0498	.0538
August.....	.0350	.0325	.0325	.0350	.0506	.0633
September.....	.0375	.0350	.0350	.0365	.0505	.0675
October.....	.0400	.0400	.0375	.0500	.0718	.0818
November.....	.0404	.0425	.0425	.0523	.0770	.0870
December.....	.0404	.0425	.0425	.0523	.0718	.0823
Year.....	.0353	.0351	.0355	.0388	.0568	.0600

¹ Mr. W. C. Mullendore in the summary report of the Food Administration, analyzing the milk situation as it existed in the summer and autumn of 1917, says:

"In some of the larger centers the controversies became very bitter and often unreasoning. An increase in the price of milk when made was followed by a marked decrease in consumption, which not only resulted in suffering children, but also dammed the supply back onto the farm with a loss to the producer, which encouraged the killing off of herds. It was feared the result would be the depletion of dairy herds, a result which the consumer could of all concerned the least afford to cause.

Moreover, there was the actual problem of future supplies which was becoming more and more acute. The Food Administration realized the severity of the situation and took immediate steps to inform the public of the state of affairs, as is evidenced by the following statement issued on Aug. 26, 1917:

Milk and butter supplies are decreasing in the United States, while our population is increasing. The dairy herds of Europe are diminishing rapidly because of the conditions created by war, and there is no probability of improvement in these conditions. The dairy problem in this country, therefore, is not only a war emergency problem, but one that will continue after the war.

The world's dairy supplies are decreasing rapidly for two important reasons: First, the dairy cattle of Europe are diminishing, for Europe is being driven to eat its cattle for meat; second, the diversion of labor to war has decreased the fodder supplies, and the shortage of shipping has limited the amount of imported fodder, and therefore the cattle which can be supported and the productivity of the individual cow have been reduced. Even our own dairy supplies are not keeping pace with our growth of population, for our per capita milk supply has fallen from 90 to 75 gallons annually in the past 15 years. Yet to-day we must ship increasing amounts of dairy products to our Allies.

The dairy situation resolves itself into several phases. First, it is to be hoped that the forthcoming abundant harvest will result in lower prices of food and diminish the impetus to sell the cattle for meat. Second, the industry needs encouragement, so as to increase the dairy herd, and thus our dairy supplies, for the sale, first, of our own people and, second, of the Allies. The people must realize the vital dependence of the well-being of their children, and thus of the Nation, upon the encouragement and upbuilding of the industry."

There was, too, always a third party with whom to reckon, the ultimate consumer, who would bear the burden of increasing prices. He of course objected to an increase on the part either of the producer or distributor, and often accused both of profiteering.

The Food Administration soon was called upon to help solve the difficulties, and after consideration it became apparent to that body that here was a problem peculiarly difficult. For not only was there the question of determining a fair price,¹ but there was also the problem of enforcing such a price after it had been determined, and for such action the Food Administration had no power.² The problem had to be solved, however, and the first step taken was the appointment by the Food Administration of a committee to investigate the costs of milk production and distribution. The Food Administration after conferring with representatives of the milk producers, also suggested that milk contracts "affecting the prices producers receive * * * be on a monthly basis instead of a period of six months, as customary." In this way prices could be changed from month to month as conditions warranted, and many of the evil results of the long-time contract could be eliminated. This change in business method seemed not, however, to alleviate conditions to any appreciable degree, since producers, distributors, and consumers all continued to ask the Food Administration for relief.

Finally, in November, 1917, milk tribunals representing the Federal Government were asked to solve the milk problems of the metropolitan areas. These commissions were made up of representatives of producers, distributors, consumers, milk experts, and the public at large, and it was their duty "after assembling data bearing on prices to make reports that would advise the public of the true status of the milk industry" in the various districts investigated.³ Producers and distributors agreed to abide by the decisions of the commission in their respective territories so long as they remained parties to the agreement for its appointment, but they were given the right to withdraw from the arrangement upon 30 days' notice.⁴ Moreover, it

¹ Mr. Hoover in an address at the National Milk and Dairy Farm Exposition in New York on May 23, 1918, laid considerable emphasis upon the difficulties met in finding a basic price for dairy products, especially milk. Among other things, he said:

"These complexities arise from the fact that in a considerable part of the industry the raw material in feeds, the labor, land, and equipment employed, are by-products of other major agricultural operations, and the commodities produced (from milk) are all in different circumstances, by-products of each other."

² Mr. Hoover in a letter of Sept. 22, 1917, to Mr. I. Elkin Nathans, secretary of the New York Milk Conference Board, said in this connection:

"I have given earnest consideration to your request for the intervention of the Food Administration in the pending settlement of milk prices with producer's representatives. As you are aware, the administration has no authority to intervene or fix prices."

³ Commissions were appointed for the New England district around Boston, the New York City district, the Chicago district, the San Francisco district, and later (Feb. 21, 1918) for the important consuming centers of Ohio.

⁴ Report of Food Administration by W. C. Mullendore.

was voluntarily agreed that no increases in the price of milk were to be allowed while the various commissions were making their inquiries.

The commissions appear to have had different degrees of success, and the period of their functioning varied from several months to one year. The New England commission was the only one which remained in existence from the time of its appointment to December, 1918, when the oversight of the Food Administration was withdrawn.

In New York where the greatest difficulty was experienced, prices were first fixed for January, 1918, and the milk commission continued price recommendations from month to month on the basis of data submitted. In May, however, virtually all milk distributors who were parties to the price agreement specified their intention of withdrawing during the following month, and on July 1 the agreement terminated. After considerable wrangling over prices between the producers and distributors, the Food Administration was once more called in, this time to act as mediator in arriving at a fair price. There appeared, however, to be no common basis for agreement. Indeed, it was not until the Food Administration suggested a price of \$2.70 per 100 pounds of milk for the month of August, and \$2.90 for September¹ that the situation quieted down. During the remainder of the year the Food Administration continued to act as mediator in the determination of milk prices for the New York district, and their efforts seem to have been more or less successful.² Conditions in the other municipal centers were akin to those in New York, and the price problem was generally solved through the application of cost data.

Although the milk problem was immediately one of price, the degree of organization within the industry, and the consequent power of the producer and distributor to withhold milk from the market, resulted in the question resolving itself ultimately into one of public health and public welfare. There was needed not only a fair price for milk, but also a sufficient supply, and the latter meant an increase in cattle herds. The regulation of milk prices apparently did not

¹ This price was arrived at by use of a formula which averaged the cost of feed and labor required to produce 100 pounds of milk. Representatives of the distributors during the early stages of the negotiations appear to have objected to this use of a cost-of-production formula. Later, however, they gave their assent to its adoption.

² The wholesale prices, per 100 pounds, adopted for the year 1918 for New York City, for grade B milk, totaling 3 per cent butter fats within a freight zone of 150 miles were as follows:

January.....	* \$3. 52	July.....	\$2. 25
February.....	* 3. 34	August.....	† 2. 70
March.....	* 3. 22	September.....	† 2. 90
April.....	* 2. 50	October.....	† 3. 57
May.....	* 2. 46	November.....	† 3. 81
June.....	* 1. 80	December.....	† 4. 06

* Fixed by milk commission.

† Fixed by producers and consumers with Food Administration as mediator.

have a serious effect upon the supply of cattle, for the number of milch cows increased slightly during the year 1918. This increase, however, was the smallest for any single year since 1913.¹

It is impossible to determine the effect of price regulation upon the consumption of milk, since there are no reliable statistical data. The milk production for 1918 has been estimated at 46,384,000,000 quarts as against 44,640,000,000 in 1917, an increase of approximately 3 per cent. But after allowing for the increase of 123,000,000 pounds in the exports of 1918 over 1917, and taking into consideration the normal annual increase in population, it is questionable whether the consumption of milk in the United States actually increased.

OLEOMARGARINE.

The regulations relating to oleomargarine were few, since this fat was provided for under the regulations applicable to the packing industry, in whose hands the larger part of the oleomargarine production is concentrated.

Not until late in 1918 were definite steps taken to establish a maximum price for oleomargarine, and this action no doubt was prompted by the upward tendency of its price started during the midsummer months. Standard uncolored oleomargarine advanced 7.5 cents during the single month of August. A careful analysis of the costs of producing oleomargarine was made during the latter part of 1918, and 6.3 cents was determined upon as a reasonable figure to allow during the two months beginning December 1, 1918.² Each manufacturer, therefore, in figuring the total cost of his product was permitted to add to the cost of raw materials an amount not to exceed 6.3 cents per pound.³

¹ The following table from the monthly Crop Reporter of the Department of Agriculture, February, 1919, shows the condition of the milch cow herds in the United States on Jan. 1, 1919, as compared with the same day in previous years:

Milch cows in the United States.

	Number.	Per cent of pre- ceding year.		Number.	Per cent of pre- ceding year.
Jan. 1, 1919.....	24,467,000	100.7	Jan. 1, 1914.....	20,737,000	101.2
Jan. 1, 1918.....	23,310,000	101.8	Jan. 1, 1913.....	20,497,000	99.0
Jan. 1, 1917.....	22,894,000	103.6	Jan. 1, 1912.....	20,699,000	99.4
Jan. 1, 1916.....	22,108,000	104.0	Jan. 1, 1911.....	20,823,000	100.9
Jan. 1, 1915.....	21,262,000	102.5	Jan. 1, 1910.....	*20,625,000	.....

* Census report of Apr. 15, 1910.

² Manufacturing costs included: (1) Labor, (2) selling expenses (3) advertising, (4) administrative expenses, (5) depreciation, (6) taxes—not including excess-profit tax and income tax—and (7) miscellaneous manufacturing expenses—not including interest charges.

³ The cost of raw materials was defined as the cost of the following delivered at the plant: (1) Oils, (2) milk, (3) salt, (4) package, (5) color, (6) stamps, (7) cartons and paper, and (8) supplies.

As regards manufacturers' profits, these were limited to 10 per cent over cost, while to retailers there was granted the right to add 5 cents per pound over cost for cash-and-carry stores, and 6 cents per pound for stores rendering extra services.

COTTON SEED AND COTTONSEED PRODUCTS.

The early price situation.—The speculative nature of the cottonseed industry, the scarcity of substitutes for cottonseed products, and the falling off in the supply of cottonseed oil because of the small cotton crops in the years 1915 to 1917,¹ all played an important part in the price movement of cotton seed and its products during the war period.

The effect of these various factors upon the price of cottonseed products was clearly reflected even in 1915 when the price of cottonseed oil jumped from 4.4 cents in August to 7.31 cents in December. After this initial start, the price continued a general upward climb until further rise was checked by governmental action.² By August, 1917, the month of the creation of the Food Administration, cottonseed prices had risen to \$56.61 per ton, a point approximately 150 per cent above the prewar level. The main product, oil, had similarly risen from an average of \$0.0619 per pound in the prewar year to \$0.1392, an increase of about 125 per cent.

The licensing of the industry.—The importance of oils of all sorts in our war program, and the acute demand for cottonseed cake,³ made necessary some immediate action toward stabilizing prices. Accordingly, by presidential proclamation, all ginner, crushers, refiners, and dealers in cotton seed, cottonseed oil, meal and cake were

¹ The 3 years ending 1918 were relatively lean years in cotton seed production. The amount of cotton seed crushed was considerably smaller than in any of the preceding 3 years, and had its effect upon the production of cottonseed oil. The fluctuations which characterized the course of the cotton seed industry are shown in the appended table.*

Year.	Cotton seed production.	Cotton seed crushed.	Cottonseed oil (crude) production.
	<i>Short tons.</i>	<i>Short tons.</i>	<i>Pounds.</i>
1912-13.....	6,104,000	4,580,000	1,435,000,000
1913-14.....	6,305,000	4,848,000	1,500,000,000
1914-15.....	7,186,000	5,780,000	1,790,000,000
1915-16.....	4,992,000	4,202,000	1,300,000,000
1916-17.....	5,113,000	4,479,000	1,492,000,000
1917-18.....	5,040,000	4,252,000	1,344,000,000

* Data from War Industries Board Price Bulletin No. 15, "Prices of Edible Vegetable Oils."

² See chart on p. 114.

³ The autumn of 1917 witnessed a severe drought in the southwestern section of the United States, and there was great suffering among cattle because of the shortage of feed stuffs, the most important of which was cottonseed cake. The unusual demand caused by this situation still further accentuated the already high price of cottonseed cake, and the Food Administration realized that immediate action toward stabilizing the situation was necessary.

placed under license on November 1, 1917. Regulations designed to prevent speculation were soon put into effect, and hoarding, reselling, and the making of long-time contracts were prohibited. Moreover, speculation in cottonseed oil on the New York Produce Exchange was checked. About one month later the first attempt at regulating the price of cotton seed and its products was made, and on December 7, 1917, the margin allowed to any dealer in cotton seed in car lots was fixed at \$2 per ton. Crushers' margins were also fixed at the same time, and a maximum margin of \$13 a ton over the cost of a ton of cotton seed was allowed for products obtained from crushing.¹ But even with fixed margins there was no guarantee that the varying costs of cotton seed would not cause fairly important fluctuations in the price of any given product in the same localities, if not in the same mill. For, although a margin had been fixed for the sale of cotton seed, there still remained the possibility of appreciable differences in the initial cost to which the allowable margin was to be added. This difficulty was soon foreseen, however, and a further restriction was included in the regulations applying to the cottonseed industry, limiting to a degree the price that could be paid by a crusher for the seed he used. He was not allowed to pay higher prices for cotton seed in one market than he paid for cotton seed of the same quality in any other market.

Thus, the price of cotton seed was virtually fixed and the return to the crusher confined to more or less narrow limits. There yet remained the problem of the refiner's price. This appears to have been left relatively untouched, since the control over the profits of refiners and distributors through the license system² afforded a sufficiently powerful weapon to keep the price down. It soon became apparent, however, that the market would be further stabilized if the cost of the crude cottonseed oil were made uniform to the various refiners. The maximum price of crude cottonseed oil, therefore, was fixed by agreement with the producers at 17.5 cents per pound at

¹This margin of \$13 was to pay not only for manufacturing costs, but also for bags and other incidentals used in packing the products. This margin, however, was to apply only to a certain minimum yield from a ton of seed. Thus, for example, a standard yield of products was worked out for a ton of cotton seed and a margin of \$13 was allowed on this yield. If, however, the product of a crusher happened to be more than the standard yield, he was allowed to sell the excess without reference to the fixed margin, "provided the price charged for said excess products shall not exceed the average price for the other products in said yield."

The standard yields for a ton of seed fixed by the Food Administration were as follows: Southern States east of the Mississippi River—43 gallons of oil, 960 pounds of meal, 140 pounds of lint, and 480 pounds of hulls; States west of the Mississippi River—38 gallons of oil, 1,000 pounds of meal, 150 pounds of lint, and 470 pounds of hulls.

²One of the fundamental rules applied in the regulation of the distribution of food-stuffs, as mentioned in previous pages, was that "licensees shall sell the commodities specified in his license at not more than a reasonable advance over the actual cost * * * without regard to the market or replacement value at the time of sale." The wholesale price of cottonseed oil was controlled by a maximum margin of 12 to 15 per cent, fixed on sales to retailers on June 15, 1918.

the crushing mill, effective January 1, 1918. This price, it should be noted, was about 2½ cents above the average for the year 1917. The agreed price may appear very high, but fats and oils were in abnormal demand for war purposes, and it was believed that a high price was necessary to encourage high-cost producers.

Control over the 1918 crop.—With the advent of the new cotton crop of 1918 it became apparent that a more thorough method of price stabilization would be necessary. This opinion was held not only by the cottonseed product manufacturers but also by members of the live-stock industry who were feeling the effects of an unsteady market for cottonseed meal. The cotton seed producers were especially insistent that a more complete system of control be adopted, and in September representatives of the industry recommended that the Food Administration stabilize the price of cotton seed at \$70 per ton in carloads lots. This basic price was to apply to cotton seed yielding 41 gallons of oil per ton, and variations were to be allowed between a minimum of \$64 and a maximum of \$74 in proportion to the oil yielded. A differential, as in the previous year, was fixed for the return to crushers. The allowance over cost, however, was increased over that for the 1917 crop and a maximum advance of \$18.50 over the price paid for a ton of cotton seed was allowed for the products made therefrom. Prices were also announced for cottonseed meal and cake, as well as for crude cottonseed oil.¹ The War Industries Board had already fixed the price of linters;² and thus there was inaugurated a complete system of price fixing extending from the farmer who raised cotton seed to the retailer who disposed of the products.

The post-armistice situation.—With the signing of the armistice arose the problem of disposing of cottonseed products at the agreed prices. Not only had large amounts of seed and oil accumulated in certain localities,³ but there was also a large amount of cheaper foreign oils competing in the American market with domestic cottonseed oil, and underselling it.⁴

¹ It appears that the refiners were somewhat hesitant as to agreeing to take the output of the crushers at the suggested price of 17½ cents per pound f. o. b. mills, since they had no assurance against loss should the market for their product decline. The Food Administration, however, promised to assist the refiners to maintain their price throughout the year.

² See page 703 of the present volume.

³ In certain sections of the country when the cotton crop did well, accumulations of seed and oil were so great as to cause many crushers to cease operations. This, of course, reacted upon the ginner from whom the crusher received his seed, and so on down the line to the farmer who raised the cotton. (Cf. chapter on "Cotton seed and cottonseed products," by W. C. Mullendore, in the summary report of the United States Food Administration.)

⁴ Because of the scarcity of fats and oils during the war period, the importation of foreign vegetable oils was encouraged. Thus, our vegetable-oil imports in 1918, in spite of the acute shipping situation, were 48 per cent larger than in 1917 and 114 per cent

Moreover, there was the linter difficulty with the War Industries Board which threatened seriously the linter market.¹ The industry was in a precarious condition, and it seemed as if there would be little relief afforded from any quarter, when on February 11, 1919, the Food Administration called together representatives of all branches of the industry with a view to finding a solution. It was the opinion of these representatives that the industry would be greatly aided by the stimulation of exports, and they further recommended that—

Such orders as were received for lard substitutes through the Food Administration or by the manufacturers should be manufactured from domestic cottonseed oil; that crushers should use their best efforts to purchase seed from localities where the heaviest congestion of seed existed; and that refiners should purchase crude oil from crude mills where the heaviest congestion existed. They further unanimously agreed that the stabilization plan of the Food Administration should be carried out to its completion, notwithstanding the fact that the armistice had changed the situation, and there was a fear of greater disaster to the industry if the Food Administration should cease its efforts to maintain the price while this congested condition existed.

The American Relief Administration, however, appeared on the market with orders for large amounts of oil for European distribution, and the heavy exports² soon relieved the situation. The sudden flow of oil to foreign countries, together with the rise in the price of lard and the consequent increased demand for lard substitutes, appears to have brought the cottonseed industry back to normal. By the end of May virtually all of the cotton seed of the 1918–19 crop had been disposed of at the stabilized price. The major part of the manufactured products had also been marketed on the basis of the

larger than in 1916. Compared to our imports for the 12 months immediately preceding the war they had increased 181 per cent.

United States imports of vegetable oils.*

	Pounds.		Pounds.
1918.....	902, 000, 000	1916.....	420, 000, 000
1917.....	616, 000, 000	1913–14†.....	321, 000, 000

* Approximate figures based on data from Monthly Summaries of Foreign Commerce of the United States Department of Commerce.

† Fiscal year ending June 30, 1914.

¹ The War Industries Board had fixed the price of linters, as mentioned above, and had arranged for the Ordnance Department to take over the entire linter crop. After the signing of the armistice, however, the latter body wished to be relieved of their obligation. A long controversy took place, which was followed by an agreement whereby the War Department was to take all the linters produced up to an agreed date. (A more detailed review of the linter situation will be found on page 304 of this volume.)

² The increase in cottonseed oil exports in the early months of 1919 is well brought out by the following table:

Exports of cottonseed oil from the United States.

	Pounds.		Pounds.
December, 1918.....	11, 875, 368	February, 1919.....	32, 042, 282
January, 1919.....	26, 573, 309	March, 1919.....	19, 669, 660

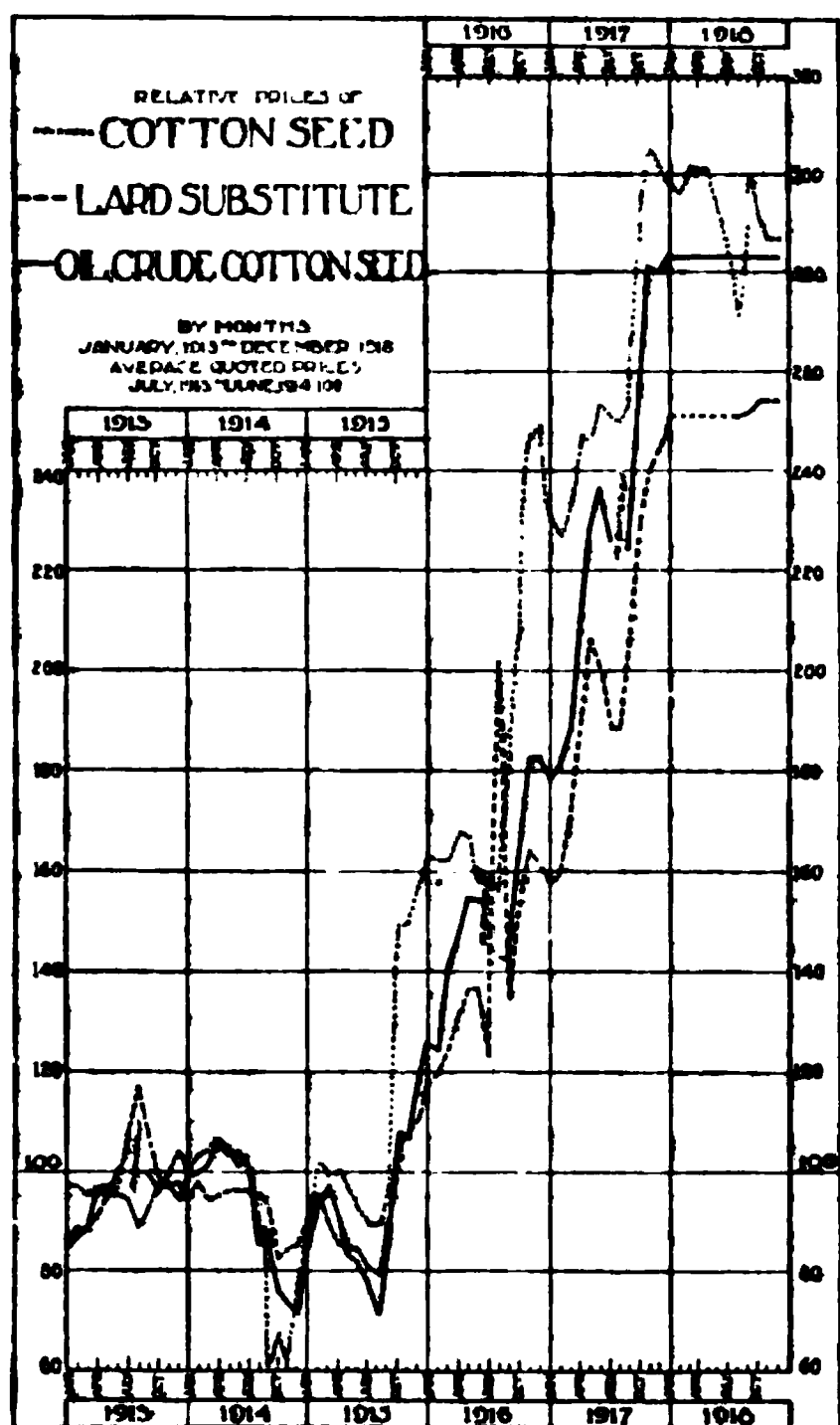
agreed prices, and stocks were about equal to the average for May of previous years. It was evident, therefore, that control of the cottonseed industry was no longer necessary, and on May 31, 1919, "all price regulations and agreements regarding cotton seed and products manufactured therefrom, including lard substitutes" were withdrawn.

The effects of control.—In December, 1917, when the first definite price regulation was applied to the cottonseed industry, cottonseed

oil was selling for a price 180 per cent higher than its prewar average, and approximately 100 per cent above that of commodities in general. Similarly, lard substitutes were about 150 per cent higher than in the prewar year, and about 70 per cent above the general price level. Whether the price stabilization inaugurated by the Food Administration prevented a further increase, it is not within the province of this study to determine. One fact should be remembered, however, that the prices of cotton seed and its products were not lowered through governmental regulation. They were only stabilized. Indeed, it may be said that the Food Administration indicated its approval of the existing prices of these commodities in late 1917 and fixed them at the then prevailing level.

The elimination of speculation no doubt resulted in a very substantial

benefit to the farmer, and reports to the Food Administration from seed dealers showed that the "farmer * * * received approximately \$10 per ton more for his 1917-18 crop than he customarily received."¹ Whether the fixed high price stimulated the production of cotton seed or its products is doubtful, especially in the light of the latest available data. The cottonseed production for the year 1918-19 was approximately 5,360,000 tons,² a crop slightly larger



Relative prices.—Cotton seed; lard substitute; and Crude cottonseed oil.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

¹ W. C. Mullendore.

² Bureau of Crop Estimates, U. S. Department of Agriculture.

than that of 1918, but small when compared with the output of earlier years.¹ And, further, the amount of seed crushed for the crop year up to April 30, 1919, was but 4,083,900 tons, as compared with 3,955,329 tons for the same period in the preceding crop year, and as against 4,167,527² tons for the corresponding time in the crop year 1916-17.

CANNED AND DRIED FOODS.

Vegetables.—It was not extraordinary that regulation of the canning industry should have been provoked when profits of concerns in various parts of the country showed an average increase from 9 to 32 per cent in a single year,³ and when there was a pressing war-time need for the essential foodstuffs which they produced.

Canned food prices by 1917 had risen far beyond the level of commodities in general. The large demands of the Army and Navy had resulted, even before the creation of the Food Administration, in the appointment of a war-service council of canners to take care of the requirements of the various governmental bodies, and the canners of peas, dried beans, tomatoes, corn, salmon, and sardines were included in the presidential license proclamation of October 8, 1917. Accordingly, on the 1st of November, the greater part of the canning industry went under license.⁴

Steps were taken immediately to curb speculation, and the first method considered was that almost universally applied, namely, the prohibition of long-time contracts. But the customs and seasonal character of the trade appear to have made the application of this rule to the canning trade impracticable, and instead of limiting contracts to the customary 60 days, as in other industries, licensed canners were prevented from quoting prices on future sales before February 1 of the year in which such products were to be canned.⁵

¹ See table on p. 110.

² Data from U. S. Bureau of Census, Department of Commerce.

³ The Federal Trade Commission's "Report on Canned Foods" (1918) in its chapter on profits says, among other things:

"In 1916, 42 packers, representing invested capital amounting to \$12,752,241.03, showed net incomes aggregating \$1,224,009.69. Thus, the return on investment of these packers averaged 10 per cent. In 1917, 37 packers, representing invested capital amounting to \$12,224,210.68, showed net incomes aggregating \$3,876,263.08. The average return for this year was 32 per cent. The average return on companies for which there were both 1916 and 1917 statistics was 9 per cent in 1916 and 32 per cent in 1917."

⁴ The proclamation of Oct. 8, 1917, included only those packers whose output exceeded 5,000 cases per year. On Jan. 10, 1918, this amount was lowered to 500 cases per year, thus virtually licensing the entire industry. On Feb. 28 manufacturers of tomato catsup and other tomato products were added to the licensed list, while on June 15 canned tuna came under the control of the Food Administration.

⁵ Mr. W. C. Mullendore, in the summary report of the Food Administration, *ibid.*, in discussing the future contract situation as applied to the canning industry, says, in part:

"This industry is composed of thousands of small units and it does not require a large concentration of capital. The produce to be canned must be obtained in its fresh state direct from the grower, so that the radius of operation of the average canner is neces-

No method of price regulation other than the "reasonable-advance-over-cost" clause was applied to the canners at first. It was soon found, however, that the enforcement of this rule presented endless difficulties, for not only did the costs vary widely in different parts of the country, but also in different plants in the same neighborhood. Moreover, the character of the industry was such that the raw materials used were but a minor factor in the total cost, and hence it was impossible to determine a margin which could be added over cost.¹ The first measure toward solving this problem was one of averaging the cost of the season's pack. On January 28, 1918, regulations were amended so as to limit the selling price of canned "goods manufactured and on hand to not more than a reasonable advance over the average cost of the season's pack." This was but a temporary palliative, however, for it was soon decided that an efficient system of price control would require the fixing of a definite "maximum margin in cents per dozen cans" over the cost of production. This meant, of course, an analysis of the cost figures of each individual plant, since the food law had been so drawn as to make it impossible for the Food Administration to reach the grower. However, the Federal Trade Commission had, in early 1918, completed a study of canning costs and from their conclusions it was possible to determine a reasonable profit, which could be used in determining the differential to be allowed the trade.

Thus the canners throughout the country were called upon to submit cost estimates for their respective plants, and to these costs, as checked up and approved by the Food Administration, were added "maximum margins in cents per dozen cans" which were to represent the differences between costs² and selling price. These

sarily small. In order to secure a supply for his plant the canner contracts with the neighboring growers for the crop of a certain number of acres to be planted for the production of a named commodity. Before the adoption of the Food Administration rule prohibiting the making of these contracts before February 1 of the year in which the products were to be canned, they were customarily made in the early winter. Having made his contracts the canner buys his stock of cans, packing cases, machinery, labels, and such supplies for his season's pack. Since many of the canners are men of small means, they find it necessary to borrow most of the money for these purposes from the local banks. Before loaning the money the banks often require the canner to assure himself of a market by making contracts with responsible distributors for the sale of his commodity. Practically, therefore, the canner's pack may be sold before the crops for the raw product to be canned have been planted. The Food Administration recognized that this practice was the outgrowth of unalterable conditions in the industry and that it served as a safeguard both for the farmers and for the canners. The usual Food Administration rules prohibiting future contracts more than 60 days in advance were, therefore, not applied to canners."

¹ The tremendous divergencies in the costs of canning vegetables, for example, are emphasized in a table showing the range for plants in the various parts of the country, included in the Federal Trade Commission Report, *ibid.* The cost of packing corn ranged from \$0.65 to \$1.40 per dozen cans; tomatoes, from \$0.60 to \$1.15; and peas, from \$0.60 to \$1.45.

² In contrast with the methods of price-fixing used for commodities other than food, the following clause in the Food Administration regulations for canners is of interest:

"Cost shall not include income and excess-profits taxes; interest on investments, interest on long-term notes, or crop hazards."

margins varied from 15 cents to \$1 per dozen cans, according to the type and grade of the vegetables canned,¹ and were believed to provide a profit to canners large enough to encourage production.²

Canned fish.—The declining imports of sardines and the governmental requirements for canned salmon³ brought the 1917 price of these types of fish above their prewar levels. These high prices were of great significance to the Food Administration, especially in view of the meat shortage, and immediate action was taken toward the stabilizing of prices.

Sardines: One of the earliest price agreements of the Food Administration was made with the Maine canners of sardines in October, 1917, before the canning industry came under license. This agreement called for a maximum price of \$5.60 per case for one-quarter oil canned sardines, and the pack of 1917 was disposed of at this price. The increased costs of the following year, however, required a revision of prices. Since the Food Administration in this case, unlike that of vegetables, had the power to fix a price for the "raw material" which made up the cost of the pack, it was decided to determine a price for sardine herrings. The fishermen of Maine were called together in April, 1918, therefore, and a price of \$25

¹ Differentials allowed were:

Corn (per dozen cans) :	Cents.	Tomatoes (per dozen cans) :	Cents.
No. 2 standard-----	19	No. 2 standard-----	18
No. 2 extra standard-----	22	No. 2½ standard-----	22
No. 2 fancy-----	30	No. 3 standard-----	27
Peas (per dozen cans) :		No. 3 fancy-----	31
No. 2 substandard, average all sizes-----	15	No. 10 standard-----	90
No. 2 standard, average all sizes--	22	No. 10 fancy-----	100
No. 2 fancy, average all sizes----	31		

It will be noted that canned beans are not included in the above list. This was due to the prohibition placed on canning beans in containers made of tin plate without a special permit. It was not until Nov. 1, 1918, that the canning of beans was permitted, and then only an amount equal to the average pack for the three months, November, December, and January.

² One other matter should be mentioned in this connection, namely, the question of future contracts. It was possible, for example, that on making delivery of certain products several months after figuring out preliminary costs, the actual cost might prove smaller than at first expected. This, of course, would mean a higher profit than allowed by the Food Administration. The solution of this problem was left in the hands of the packers themselves, as described by Mr. W. C. Mullendore, *ibid.*

"The canning industry felt that it would be desirable to submit to the Food Administration these future contract sales' prices, asking the Food Administration to sanction them and permit them to proceed in the confident belief that these prices would be acceptable to the Food Administration. The Food Administration was unable, however, to state what would be reasonable prices, for no matter how accurate an estimate of cost may be, the crop is not determined until actually put up, and therefore the Food Administration could not undertake to justify canners' future contract prices. In lieu of this method each canner was required, before invoicing his goods, to review the estimate he had made of his costs, and if it were determined that the original estimate was higher than the goods were proving to cost, then to revise downward to a point that would not provide a profit in excess of the Food Administration maximum."

³ 10 per cent of the 1917 salmon pack was reserved for Army and Navy needs; while of the 1918 pack 80 per cent of the red, 75 per cent of the pink, and 65 per cent of the chum Alaska salmon was taken over by the Government.

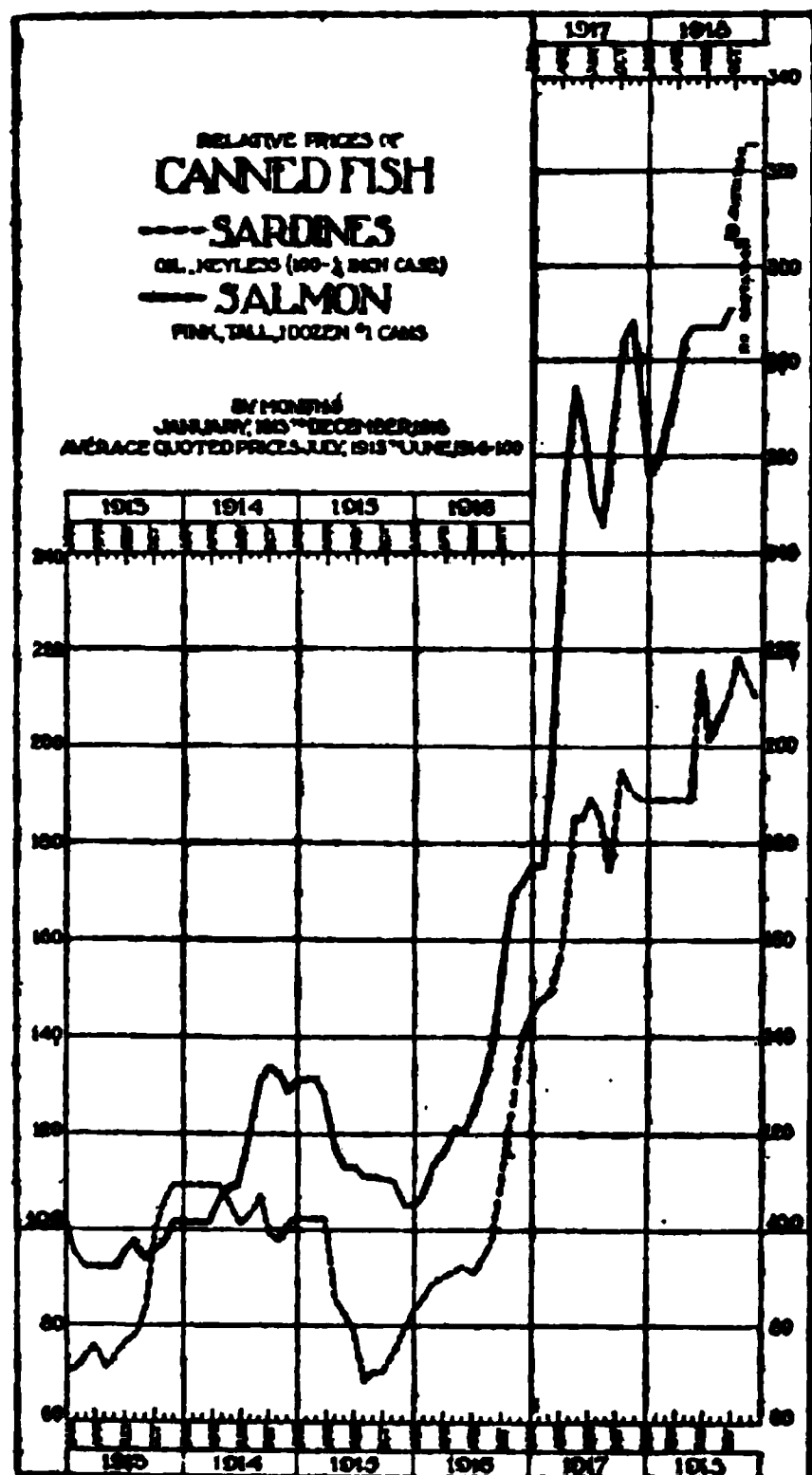
per hoghead was established as the maximum price to be paid for raw fish by the packers.

With the price of sardines fixed, it was relatively a simple task to agree upon a price for the canned product. After an investigation of costs, it was decided that a price of \$6.50 per case for one-quarter

oil, keyless, and \$6.25 per case for one-quarter mustard, keyless, sardines, would provide a reasonable profit to the canners, and these prices were fixed as maxima for the remainder of the season.¹

It was not until October, however, that the price of California sardines was determined. A series of three prices was agreed upon, varying with the size of the raw fish to be sold;² and on the basis of these raw-fish prices, maxima for the canned products were set.³

Salmon: Salmon, of course, played the most important part in the canned-fish situation of 1918-19, but in spite of this fact, it was not until many months after the price of sardines had been "pegged" that salmon canners were thoroughly controlled. Speculation had been reduced and the reasonable-profit rule had been applied to the salmon industry back in November, 1917, but lack of information made it impossible to



Relative prices—Canned fish: Sardines, oil, keyless (100- $\frac{1}{2}$ inch case); and Salmon, pink, tall, one dozen No. 1 cans.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

fix a definite price until well along in 1918. The price of the fish to the fisherman was first fixed, the output for Alaska, Oregon, and the coast streams of Washington serving as the basis.⁴ Packing costs

¹ These prices also were applied to the catches of the Canadian fishermen, who agreed to accept the maximum of \$25 per hoghead for their raw fish.

² The prices for raw sardines accepted by the Food Administration, effective for the 1918-19 season, were: Under 7 $\frac{1}{2}$ inches, \$30 per ton; over 7 $\frac{1}{2}$ inches, \$15 per ton; fish for fertilizer purposes, \$10 per ton.

³ The maximum canned sardine prices per case agreed upon were: Tomato—Quarter round, \$3.25; one-half round, \$4; ones round, \$5.75; ones oval, \$7.25; one-half oval, \$5.50. Oil—quarter round, \$3.25; one-half round, \$4.15; ones round, \$6.

⁴ Prices were fixed for the various sections of Alaska and Washington, while the catch of the Columbia and Rogue Rivers of Oregon was differentiated into several types known as chums, chinooks, silver sides, and steelheads.

were then investigated in the various important salmon-canning sections, and on the basis of these costs, plus the prescribed raw-fish prices, maximum prices were established for the canned stock.¹

Canned Tuna: Tuna fish prices were dealt with in a manner similar to sardines and salmon, the price of the raw fish being first established. A conference of the Food Administration with the fishermen resulted in the fixed price for all raw tuna of \$100 per ton. Exception was made in the case of two types known as Albacore and Blue Fin tuna, however, and for these an extra \$10 per ton was allowed. On the basis of these figures, prices were determined for the canned product, and the latter part of 1918 found the price situation in the tuna fish industry in a more stabilized condition.

Dried fruits.—Preparers and packers of dried peaches, apples, prunes, and raisins were included in the license decree of October 8, 1917.² Significant control was exercised over the prices of these fruits, although the primary aim of the Food Administration was apparently the checking of any possible speculation in the industry. In its uncertain character this industry corresponds closely to that of the canning trade. As with canned goods, it was necessary to limit as much as possible the control over fruits which were not yet on the market, and thus the first regulations affecting the industry prohibited "either the purchase or sale of new-crop fruits for spot delivery before May 1 of the year in which they were to be packed."³

The selling price of the various fruits was at first kept under surveillance by a regulation requiring licensees who shipped in carload lots to submit to the Food Administrator all price lists or circulars relating to the price of their products; and by use of these the Dried Fruits Division kept informed as to the tendency of prices within the trade. This system, however, did not result in as effective a control as was desired, and in its place a method of price control similar to that used in the canning industry was adopted. The fruit growers agreed to sell their peaches to the packers at 11 cents per pound. Similarly the raisin price was fixed at 5½ cents. The packers were then called into conference and a schedule of maximum prices at which their products would be sold to the trade was adopted.⁴ A profit limitation, however, was also placed upon the packers by limiting their returns to 4 per cent.

¹ The complete series of canned salmon prices as established by the Food Administration in the three leading salmon sections are to be found on pp. 593-4.

² The Dried Fruits Division of the Food Administration originally had in its charge the supervision of the dried-fruit industry. It was later consolidated with the Canned Goods Section under the new name of the Canned Goods and Dried Fruits Division.

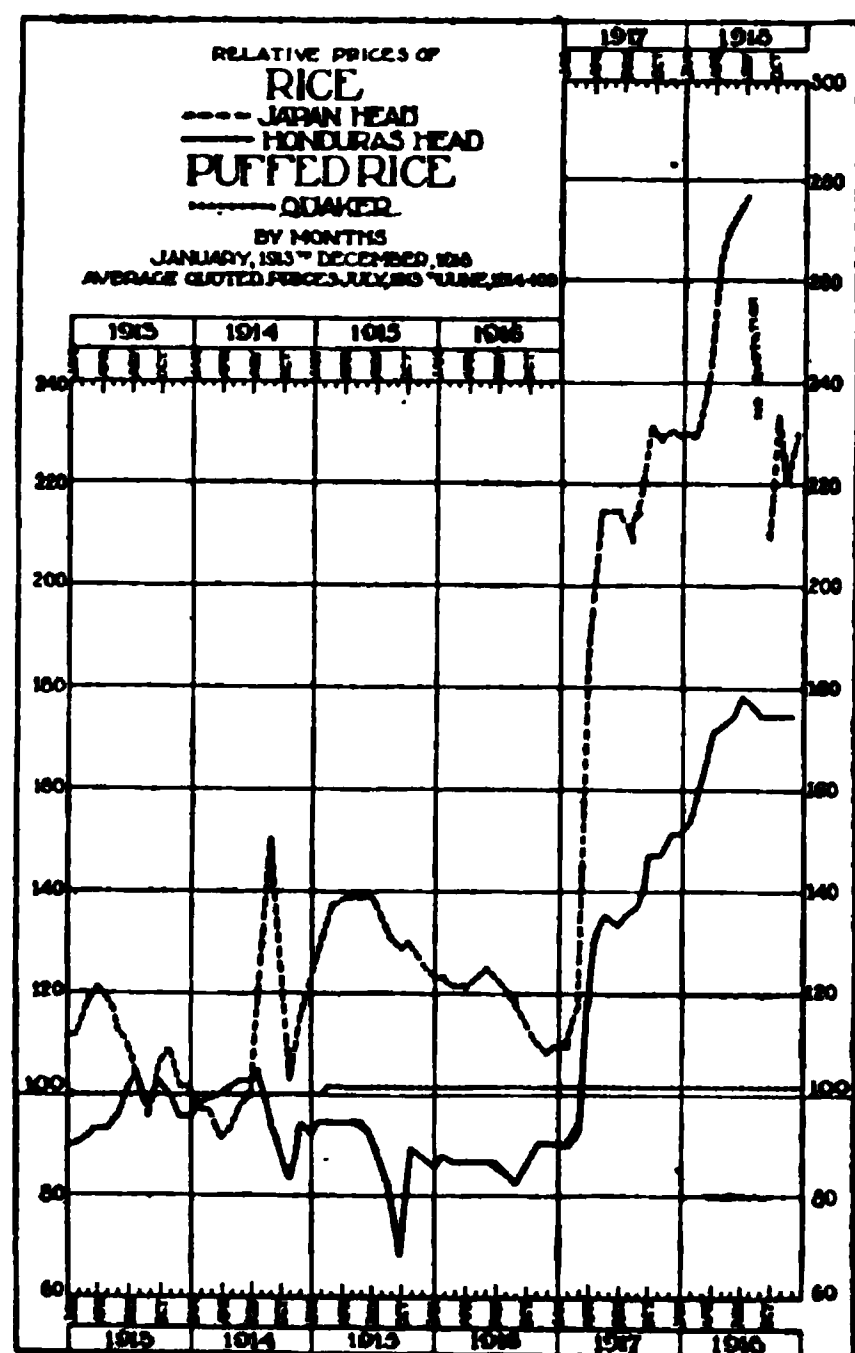
³ On May 7, 1918, the date at which purchases of new-crop fruits not ready for spot delivery could be made, was changed to June 1, and on May 24 the date was extended to July 1.

⁴ See p. 596 for schedule of agreed fruit prices.

But this method of price regulation was applicable only to the peach, raisin, and prune packing industries, since the centralization of both sources of supply and packing plants made possible a system of effective supervision. The situation was different in the case of dried apples, for, while the packers were under license, the enormous number of apple raisers over the country made it impossible to come to a price agreement with any considerable number of growers. The only resort, then, was the regulation of packers' profits, and as in the

case of the peach and raisin packer on the Pacific coast, their return was limited to 4 per cent.

The results of control.—Early in 1919 restrictions upon the canning industry were removed, and the trade once more resumed its usual business practices. It appears that little change was made in the level of the prices of the various canned commodities, but at least a more stable market followed the inauguration of fixed maximum margins. The Food Administration claims that its price regulations resulted in a radical revision of contracts, and an estimated saving to the American consumers on the 1918 pack of peas, tomatoes, and corn alone of over \$7,000,000.¹



Relative prices.—Rice, Japan head, and Honduras head; and Puffed Rice, Quaker.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

importance of rice as an article of diet was reflected in the price tendency of rice after our entrance into the war. The price of Japanese rice rose 82 per cent in the two months March to May, 1917, while the Honduras variety increased 42 per cent in the same period. This upward trend continued until the new crop appeared in October.

RICE AND RICE FLOUR.

The large demand for cereals of all kinds and the growing im-

¹ See W. C. Mullendore, *ibid.*

Then prices remained relatively stable until February, 1917, the period of harvesting. But the rise was resumed then, and not until the Food Administration undertook to "peg" the price of rice in July, 1918, did the first evidence of stability appear.

Control over the industry.—Rice became a substitute for wheat during the period of cereal grain shortage, and this fact had weight in determining that all "importers, manufacturers, and distributors of rice and rice flour" should be licensed under the presidential proclamation of October 8, 1917. At the very beginning, regulations were inaugurated which limited the returns to rice dealers, and licensees were forbidden to sell rough rice "at an advance over the actual price in excess of 1 per cent over purchase price, plus storage, insurance, and interest on the investment at the rate of 6 per cent per annum."¹

Resales were prohibited so as to prevent speculation, and millers were restricted in the amount of rice they could keep on hand. Also, contracts for future delivery were limited to 30 days.

But the limitation upon profits of rough-rice dealers and the elimination of speculation, was of little significance as a factor affecting rice and rice products prices, in view of the tremendous rice demands of 1917 and 1918. Even in the summer of 1917 our supplies of rice were beginning to feel the effects of the wheat shortage and the demand for wheat substitutes, both foreign and domestic; and on August 1, 1917, the end of the crop year, our carry-over of rice was but approximately one-half of that of the preceding year. The stimulated consumption of rice during the spring of 1918 at the encouragement of the Food Administration still further accentuated the situation, and August 1, 1918, found the United States bare of rice supplies.

The price agreement of the summer of 1918.—The prices of rice continued to advance through 1917 and early 1918, and by July of 1918, it was realized that the stabilization of rice prices was necessary, and the rice producers and rice millers of the country were called into conference.² The final solution proved to be a system of price fixing by agreements whereby the rice millers agreed to pay definite prices to the growers of rough rice, and also promised not

¹ Commission charges of agents were also limited to 1 per cent. The "reasonable-advance-over-cost" rule was applied to clean rice as in the case of all other commodities.

² There is another factor quite generally overlooked which has an important bearing upon the problem of fixing rice prices. Imports play an appreciable part in the rice supply of the United States, and in 1918 they were equal almost to one-third of our production. On July 26 the War Trade Board announced that all imports of rice shipped from foreign ports after July 31 would be prohibited, and this meant that our supply, already too small, would be further cut down.

to sell clean rice at more than prices named in the agreement,¹ ranging from 7½ cents per pound for choice Japan, to 9½ cents for fancy Honduras.

On this basis, with the broker's margin definitely fixed;² with the millers' maximum price of rice flour fixed by the Food Administration at 75 cents per 100 pounds above the purchase price of brewers' rice or screenings;³ resales prohibited; and a maximum margin determined for the sale of rice from wholesalers to retailers, it was quite evident that much had been done toward the stabilization of rice prices. Indeed, the Food Administration went so far as to state publicly that in their opinion consumers should "be able to purchase rice at a price of approximately 10 to 12 cents per pound, depending on remoteness from the milling centers."

The method⁴ of price regulation adopted, however, required supervision, for rough rice prices were based on grades, and the decision as to how a certain lot of rice was to be graded could not be left in the hands of the grower; nor, on the other hand, could the grading be intrusted to the miller. Accordingly, a general committee was appointed to accomplish a fair valuation of the grower's product, and to these men was left the task of supervising and carrying out the contracts and the grading and valuing of rice samples submitted by the growers.⁴ Moreover, in order equitably to allocate the rice crop among the various millers of the country, each mill was allotted a maximum amount which it might purchase of the 1918 crop, based

¹ The prices fixed for rough rice to be paid to growers by the millers were as follows: \$7.50 per barrel of 162 pounds for No. 1 and No. 2 Honduras (river type) in sacks; \$7.25 per barrel of 162 pounds for No. 3 Honduras (river type) in sacks; \$7 per barrel of 162 pounds for No. 4 Honduras (river type) in sacks; \$7.25 per barrel of 162 pounds for No. 1 and No. 2 Blue Rose in sacks; \$7 per barrel of 162 pounds for No. 3 and No. 4 Blue Rose in sacks; \$7 per barrel of 162 pounds for No. 1 and No. 2 Japan in sacks; \$6.75 per barrel of 162 pounds for No. 3 and No. 4 Japan in sacks. The selling prices of the products secured from the milling of rough rice were agreed upon as: Fancy Honduras, 9½ cents per pound, packed in 100-pound pockets; choice Honduras, 8½ cents per pound, packed in 100-pound pockets; fancy Blue Rose, 7½ cents per pound, packed in 100-pound pockets; choice Blue Rose, 7½ cents per pound, packed in 100-pound pockets; fancy Japan, 7½ cents per pound, packed in 100-pound pockets; choice Japan, 7½ cents per pound, packed in 100-pound pockets; fancy second heads, 6½ cents per pound, packed in 100-pound pockets; screenings (river), 6½ cents per pound, packed in 100-pound pockets; screenings, 5½ cents per pound, packed in 100-pound pockets; brewers', 5½ cents per pound, packed in 100-pound pockets.

² Broker's commissions for the negotiation of the sale of rice or rice products were limited under regulations of July 29 to: (1) 7 cents per 100 pounds on car-lot orders, except brewers' rice, sold in New York, San Francisco, Charleston, Savannah, Jacksonville, St. Louis, Kansas City, Galveston, and Houston; (2) 6 cents per 100 pounds on any quantity of rice, except brewers' rice, sold at New Orleans; (3) 8 cents per 100 pounds for car-lot orders, except brewers' rice, sold at any other point except those designated in (1) and (2); (4) 6 cents per 100 pounds for brewers' rice sold at any point, in any quantity; (5) 25 cents per ton on rice bran or rice polish at any point, in any quantity; (6) 6 cents per 100 pounds on rice flour sold anywhere, in any quantity.

³ The quality of rice flour to be manufactured was specified in license regulations.

⁴ The detailed work of grading and evaluating was placed in the hands of subcommittees, with officers in the various cities of the southern rice States and of California.

on its individual capacity and its average receipts for the three seasons 1915 to 1918.¹ Provision was also made for the sale of clean rice imported as such, and which would not, therefore, come under control as the product of American mills. For such rice a maximum advance of 10 per cent over the price paid by the importer, plus freight and insurance, was allowed.

It would seem that these arrangements resulted in marked savings to the American public, from a study of the price tendency of the Japan variety of rice after July, 1918.² Honduras head rice also shows the stabilizing effect of the price agreement of 1918. This agreement, incidentally, is still in force (June 15, 1919) and, with the exception of the wheat and sugar arrangements, is the only agreement of its kind which was extended into the summer of 1919.

COARSE GRAINS AND FEED STUFFS.

Human foods.—The coarse grains were among the many commodities which felt the effects of the stringent wheat shortage of 1917. There were, moreover, such factors as the small carry over from the 1916 crop, the large demand by distilleries, and the small crop in Argentina, which played an important part in sending the price of individual coarse grains such as corn to levels beyond those of other commodities.³

Corn, oats, rye, and barley were not important as human foods in prewar years, but took their chief commercial value from their use as feeding stuffs for live stock. The Food Administration, therefore, handled them in connection with the general problem of mill feeds. Storers, distributors, and millers of rye and its products were included in the first presidential proclamation relating to licenses issued August 14, 1917, and barley and barley flour, oats and oatmeal, corn, corn grits, and other corn products such as glucose, hominy, etc., were added on October 8.⁴

¹ The various expenses of administration, such as grading, evaluating, weighing, supervising contracts, etc., were to be borne by the milling interests who were to pay to the office of Food Administration Grain Corporation at New Orleans a fixed fee of 6½ cents for each barrel of rice purchased.

² See rice chart, p. 120.

³ A complete record of the prices of the various grains can be found in the bulletins "Prices of Barley, Hops, Rye, and their Products," "Prices of Corn and Corn Products," and "Oats, Rice, Buckwheat, and their Products," in the W. I. B. Price Bulletin Series.

The coarse grains, by the summer of 1917, had in several cases reached unprecedented heights. No. 3 yellow corn, in June, 1917, was selling for \$1.73 per bushel, and in July reached a level of \$2.06, as compared with the prewar average of \$0.685. Similarly, barley, which in the prewar months averaged \$0.6243, was selling in the summer of 1917 around \$1.40; while rye, in June, 1917, was selling at \$2.36, a price over four times its peace time average of \$0.5653.

⁴ Later, on January 10, 1918, all importers, manufacturers, and distributors of feeding stuffs were made subject to license by presidential proclamation, thereby bringing all the products of coarse grains under license regulation.

It was evident from the beginning that speculation in these coarse grains must be eliminated, else the instability of the preceding months would recur. At the request of the Food Administration, speculation on the grain exchanges had been virtually stopped in August. But the elimination of speculation meant much more than the closing of exchanges. Indeed, it meant that not only must the amount of grain which any individual should be allowed to hold be fixed, but that a limit must be set upon the length of time during which a licensee might keep his grain. The first regulations which were applied to licensees, therefore, forbade the holding or storing of grains for more than 30 days.¹

But the prohibition of speculation did little to keep in check the soaring tendencies of the various grains and their products, for, with the coming of the severe winter of 1917-18 and the tie-up of railroad transportation, the consequent shortage of supplies sent the price of these foodstuffs far above their prelicense level. The conservation rules of the Food Administration, moreover, required the buying of wheat substitutes with each purchase of wheat. This step, naturally, created an extraordinary demand for coarse grains and pushed their prices upward.

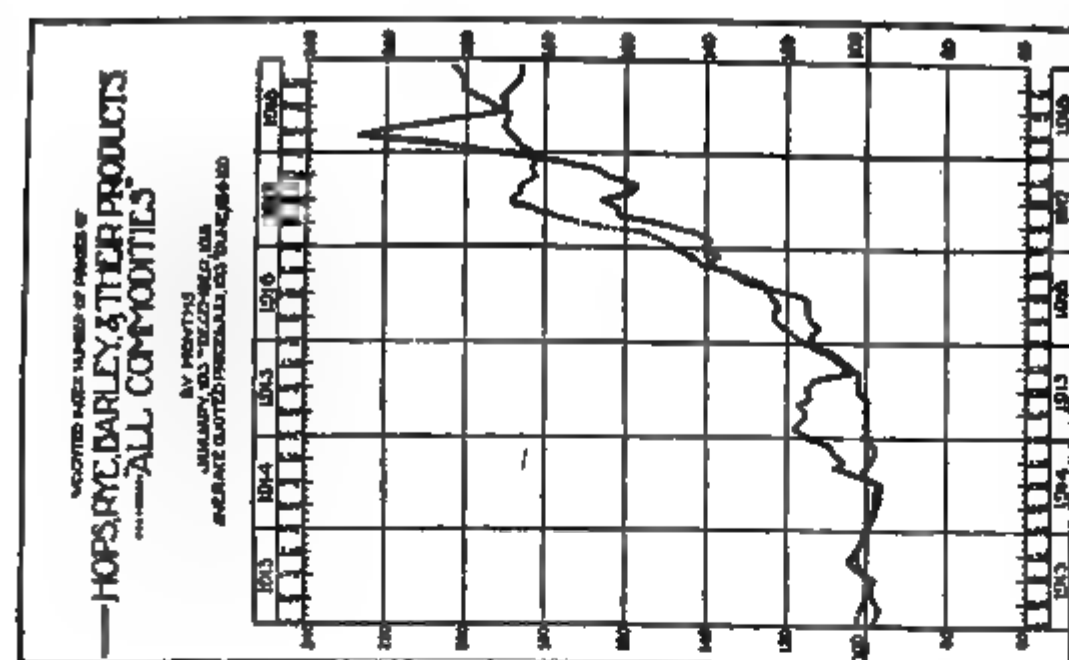
The creation of the Grain Division.—Conditions were becoming acute, and on April 1, 1918, the Food Administration created its Grain Division and gave it oversight of the coarse grain problem. The first act of this division was the opening of the grain exchanges to legitimate hedging operations. It also permitted speculative accounts limited to 200,000 bushels. so as to keep the market open and thus stabilize prices.²

A plan was needed, however, for the definite pegging of prices, and with this in view a system of weekly reports was inaugurated by which every coarse grain miller and every feed dealer advised the Food Administration of the exact cost of his raw materials and the exact selling price of his manufactured products. The Grain Division in this way informed itself of margins of profit. These

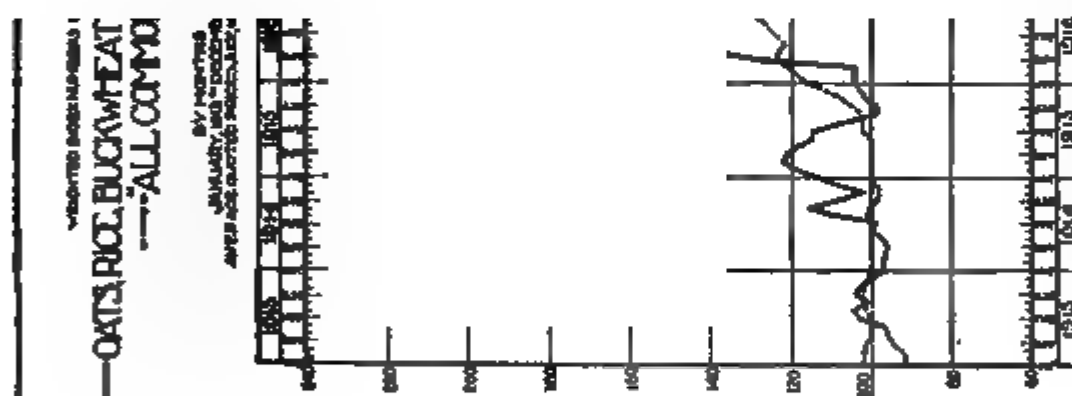
¹ This regulation made it illegal to hold or store rye at any point for more than 30 days. As regards the other coarse grains, this prohibition applied only to seaboard points, but at such points not only was storage limited to 30 days, but such grains which had been received on or before Sept. 1, 1917, could not be held for a period longer than 5 days after regulations became effective (Nov. 1).

² With the grain exchanges virtually closed and no means of hedging, it was impossible for millers and dealers to protect themselves against future price falls. In other words, they could not sell on "futures," to be delivered at a later date, and had no assurance of a profit at the time of delivery. What they did then was to charge a high margin for those sales of actual grain on hand which they did make, and in that way try to eliminate any possible loss which might result in the future, due to a fall in prices. (See final report of Food Administration, *ibid.*)

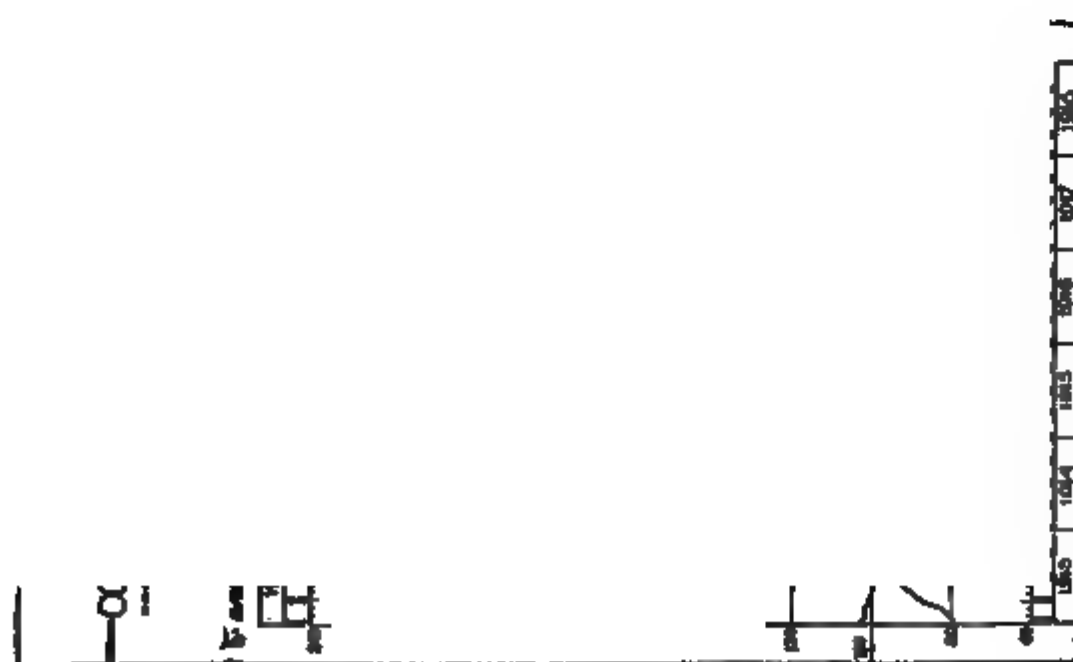
It is of interest to note that later regulations provided for losses or gains from hedging "on any recognized grain exchange" in arriving at the cost of corn, oats, rye, and barley, in interpreting the "reasonable-advance-over-cost" rule.



Weighted index numbers of prices. Hops, Rye, Barley, and their Products; and "All Commodities."—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



Weighted index numbers of prices.—Oats, Rice, Buckwheat, and their Products; and "All Commodities."—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



Weighted index numbers of prices.—Corn and Corn Products; and of "All Commodities."—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

reports were regularly and minutely checked, and as an example of the results obtained from this system it is interesting to note that in the single month of June the question of price reduction was taken up with 204 mills, 95 of whom as a result lowered the price of their products. The savings effected because of the orders of the division to reduce prices in June alone have been estimated to equal \$175,000.¹

The limitation of coarse grain millers' prices.—After digesting these reports for several months, the grain division prescribed on July 20, 1918, with the aid of the industry, a series of maximum margins to be added to costs in determining the prices to be charged for the various grain products.² Moreover, a definite limitation of 6 per cent was placed on profits of millers from gross sales of the edible products of the various coarse grains for any six-month period.

The profits of the manufacturers of coarse grain products were thus limited to reasonable bases, and it remained to fix specific margins on returns of grain dealers and elevator operators from whom these manufacturers secured their supplies.³

The formulation of definite profit limitations soon appeared desirable, and regulations were issued on September 10 fixing the maximum net profits for "any grain dealer, including country elevators dealing in grain, to 3 per cent of the first \$300,000 of the gross sales per annum, (and) 2 per cent on all gross sales in excess of \$300,000 per annum," thereby providing a system of regulation for virtually the entire coarse grain industry; excepting the farmer, whose returns were beyond the powers of the Food Administration.

¹ Similarly, price reductions in July netted \$116,000. An idea of the range of price reductions will be gained from the following table taken from the Monthly Report of the Activities of the Grain Division of the United States Food Administration for June, 1918:

Reductions per 100 pounds.

	Low.	High.		Low.	High.
Meal.....	\$0.11	\$0.80	Hominy.....	\$0.50	\$0.50
Flour.....	.05	.83	Grits.....	.30	.30

Price reductions in July varied from \$2 per ton for gluten feed to \$17.25 per ton for linseed meal.

² The following differentials (in cents per hundred pounds bulk product) were promulgated: Old-fashioned or water-ground meal, 50; standard and bolted meal, 50; pearl meal, 60; pearl or table hominy, 80; grits, 80; cream meal, 80; Ceraline flakes, 120; corn flour, 100; other cornmeal, 60; barley flour, 95; rye flour, 90; rolled oats, oatmeal, oat flour, 90. It should be noted that these prices were bulk prices for grains packed in barrels, or 100-pound jute or cotton bags, and did not apply to products sold in packages. For corn meal, corn grits, hominy, corn flour, barley flour, and rye flour sold in packages, a series of differentials over and under the bulk price were drawn up. The maximum price per pound for hominy feed, hominy meal, hominy chop, barley feed, rye feed, or oat feed produced as a by-product of manufactured edible corn, barley, rye, or oat products, could not be more than the "purchase price per pound of the grain from which it was manufactured."

³ The reasonable-advance-over-cost rule, of course, applies to dealers and mill operators.

Feeding stuffs.—The profits of feed-stuff producers were fixed in December, 1917, when a series of differentials was announced on various wheat feeds.¹ In July, 1918, further differentials were announced for wheat feeds in less-than-carload lots and individual maximum margins were designated for sales by millers to wholesale and retail feed dealers. Indeed, a fair-price schedule based on the Government wheat price was drawn up and submitted to each mill and on the basis of the schedule millers were to sell their wheat feed.

The maximum return of 6 per cent on total gross sales was made applicable also to the manufacturer of mixed feeds. A considerable margin, however, was allowed him on individual sales equaling a return of 12½ per cent on the cost of materials, manufacturing, and overhead. This maximum margin, it appears, was made wide "because of the speculative character of the products which went into the manufacture of mixed feeds, and the rapidly fluctuating prices which might prevail."

Dealers, on the other hand, were allowed a still larger margin on individual sales, and for them a maximum 15 per cent over the purchase price was considered a fair return. Moreover, their annual earnings were also limited and a yearly net profit "by any wholesale dealer in feeding stuffs of more than 4 per cent on total gross sales, if his gross sales of feeding stuffs amounted to \$100,000 * * * per annum was considered prima facie evidence of a violation of the rule which prohibited the taking of unreasonable profits."²

Feeds other than coarse grains and their products.—There are other important feed stuffs which can not be properly classified under coarse grains, but which play an important part in the American live-stock industry. These grains were all controlled to some extent, and definite price regulations were applied to their sales.

Rice feed was provided for under the agreement with the rice industry mentioned in preceding pages, whereby all rice millers agreed to sell rice polish at a price not to exceed \$50 per ton, car lots, f. o. b. mill, and rice bran at a maximum of \$36.

Beet pulp, an important by-product of the beet-sugar industry, was definitely controlled as to price, and the following were considered as maxima which would return a fair margin of profit to the beet-sugar manufacturer:

¹ See schedule of margins on wheat feeds on p. 582.

² The above rules did not apply to wheat-mill feeds, or the feeds which are discussed immediately below. In these cases, however, where wheat-mill feeds, cottonseed products, rice polish and bran, or dried beet pulp were sold, as well as other feeds, the 4 per cent was calculated on all sales.

Wet beet pulp, bulk, mill (car lots)-----per ton--	\$0. 80
Wet beet pulp out of silo, bulk, mill (car lots)-----do-----	1. 25
Dried beet pulp, sacked, f. o. b. factory (car lots)-----do-----	40. 00

The price regulation for cottonseed meal has been dealt with in the chapter on "Cottonseed and its products." Definite prices were fixed for meal and cake in various sections of the country, while hulls were to be sold at \$20 per ton, bulk, f. o. b. points of manufacture.

COFFEE.

The outbreak of war in July, 1914, followed by the allied blockade and the cutting off of supplies from central Europe, had its effect upon the price of coffee, which in former years had found a large market among the peoples of the Central Powers. With the elimination of these markets and with the constantly tightening embargoes of the allied countries to conserve shipping space, the United States soon became virtually the only large coffee-consuming country. But it became evident that we could not absorb the total production of the coffee-raising countries. The nature of the coffee industry, on the other hand, made impossible the cutting down of production to a degree commensurate with the decline in demand. The result was that throughout 1915, 1916, and the greater part of 1917, coffee sold on American markets at a figure appreciably lower than the average for the prewar years.

The coffee growers of Brazil, however, set about to get a price somewhat in relation to other commodities. The natural operations of the market provided no relief, and since it was apparent that artificial methods would be necessary, a plan which had been found practicable before was once more put into effect. This plan was the valorization scheme, whereby the Government bought up as much coffee as was necessary to stabilize the market. This undertaking by the State of São Paulo in Brazil evidently brought little immediate results; yet later developments showed that it had exerted some effect upon the coffee dealers of the United States. Moreover, the fact was emphasized by interested parties that coffee was relatively cheap and that any sudden termination of hostilities would have an important effect upon coffee values by opening the European markets.

Governmental interference.—The coffee propaganda was making itself felt by the fall of 1917 upon the speculators and dealers in coffee futures and coffee prices started upward in this country. By January, 1918, the prewar price was reached, and the Food Administration soon realized that Government interference was necessary. On January 30, 1918, all dealers in green coffee were instructed to secure licenses from the Food Administration.

Price control was the immediate occasion for this action and the first regulations promulgated had a direct bearing on sales and returns. On February 6, 1918, two days after the license regulations went into effect, all purchases and sales of green coffee on the New York Coffee and Sugar Exchange for delivery during the month of February were limited to a maximum price of $8\frac{1}{2}$ cents per pound for the standard grade, type No. 7. On purchases which were to be delivered after the month of February, there were allowed an additional carrying charge of \$0.0015 for each month on each pound of coffee. Thus the maximum spot price of coffee on the exchange was fixed at $8\frac{1}{2}$ cents. This action made it relatively simple to provide for the control of the individual dealers, in whose hands lay the distribution of coffee.

Provision was made immediately for the control of the coffee returns by the general rule of fixed percentages over cost. Importers were given the right to charge $2\frac{1}{2}$ per cent per pound over costs¹ while jobbers were allowed a maximum of 5 per cent over cost.²

Licensees were instructed to keep their supplies moving in as direct a line to the consumer as practicable, and without unreasonable delay. Resales were restricted, especially when tending to result in a higher price to the retailer or consumer. However, when there was a reasonable justification for resales they were permitted at certain fixed rates.³ The stocks of any member of the trade, moreover, were limited to 90 days requirements.

In spite of regulations limiting returns and the restricting of sales on the Coffee Exchange to certain prices, many difficulties occurred which gave trouble. They lay primarily with the rules limiting the transactions on the exchange. The maximum spot price had been fixed, and this maximum price which was the same for each month was always reached. This rule effectively stopped speculation, but seemed not to take account of certain customs of the trade. Many dealers had hedged their stocks on the exchange, hoping to buy back their hedging sales later when deliveries were due. But when such time came apparently they could not buy back these sales since holders of coffee refused to sell at the fixed maximum prices. The actual stocks, therefore, were not released to the trade. By October

¹ In arriving at cost, the licensee could take into consideration the gain or loss resulting from a single actual hedging transaction on the Coffee Exchange.

² On July 24, 1918, an amendment to the regulations increased the maximum profit allowance to 5 per cent for importers and $7\frac{1}{2}$ per cent for jobbers.

³ Returns on sales from one importer to another were limited to $1\frac{1}{2}$ per cent over cost, and on sales from one jobber to another profits were fixed at a maximum of $2\frac{1}{2}$ per cent over cost. These were increased on July 24, 1918, to $2\frac{1}{2}$ and $3\frac{1}{2}$ per cent, respectively.

the situation became acute and many outstanding orders remained unfilled.¹

The closing of the Coffee Exchange.—Finally, on October 28, the board of managers of the Coffee Exchange suspended trading in futures. This action, it was explained, was prompted by advances of coffee in the Brazilian market above the price fixed in this country. In the meantime negotiations had begun between the Food Administrator and the War Trade Board relative to a solution of the problem, and on October 14 the announcement was made that “no licenses for the importation of coffee would be issued except to the United States Sugar Equalization Board.” This action was taken to adjust coffee imports with shipping conditions, to effect an equitable distribution to the trade, and to insure the supplies necessary for home consumption. This action seemed a solution both for the tie-up in stocks which were being held under long-term contracts and for the high price in the Brazilian market. But the Food Administrator wanted to release all stocks in this country, and on November 1 ordered that all coffee futures be liquidated at the maximum price before November 9. He further prohibited new operations and transactions on the exchange after November 2. The Coffee Exchange resumed operations in order that contracts in force might be closed out, and by November 9 all deliveries of coffee on future contracts were completed and the trade secured the necessary supplies of coffee. All regulations of the Food Administrator were removed on December 31, 1918.

COLLATERAL COMMODITIES.

The Food Administration undertook control not only of foodstuffs but also of commodities intimately related with the production of foods. Ammonia and arsenic were intimately related to the conservation of foods, while ice and twine affected the ultimate price of foodstuffs to the consumer.²

Ammonia.—The part which refrigeration plays in the preservation of foodstuffs made ammonia a logical commodity for Governmental oversight. Moreover, there were the demands for ammonia for fertilizers and for the manufacture of explosives. The 1918

¹ The following statement issued by the Food Administration on the occasion of closing the Coffee Exchange shows well the condition of affairs at the time: “It had been found that several houses operating for foreign account bought coffee futures upon the New York Coffee and Sugar Exchange to the amount of several hundred thousand bags. The sellers have sold against coffee in stock and en route. The effect is to tie up this coffee from distribution for many months, and to necessitate extra tonnage being employed if our supplies are to be maintained.”

² The Division of Miscellaneous Commodities, created immediately after the establishment of the Food Administration, at first handled some of these extra-food commodities. Later this body merged with the Division of Chemicals which also had supervision over nonfood materials, and both together were known as the Division of Collateral Commodities.

requirements of the Ordnance Department for ammunition alone were greater than the entire domestic production of ammonia for the preceding year.¹ Further an important part of the American supply of ammonia had formerly been imported. The shortage of shipping had already cut down imports, and there was in prospect a still further cut during 1918.²

The needs of the situation were foreseen early by the Food Administration, and even before the ammonia industry was put under license a system of effective agreements was devised. The ammonia manufacturers were called into conference and an agreement was made whereby the allocation of the American output of ammonia was put into the hands of the Food Administrator. He in turn appointed the interdepartmental ammonia committee, upon whom devolved the task of distributing the ammonia supply and determining the supervision of allotments.³

A further agreement on the part of manufacturers obliged them not to sell anhydrous ammonia for more than 30 cents per pound, carload lots, and aqua ammonia for more than 8½ cents, carload lots.

These informal controls came before the ammonia industry was brought under license. The agreement discussed above was made on November 19, 1917.⁴ The advantages to be gained from the complete control of the ammonia industry, however, led to the licensing of the importers, manufacturers, and distributors of ammonia, ammoniacal liquors, and ammonium sulphate by a proclamation of January 3, 1918.

Ice.—Many conservation measures were put into effect, the most important of which was a campaign for the shutting down of artificial ice plants during the winter months and the utilization of natural ice. Artificial ice manufacturers were asked to use the least possible amounts of ammonia and manufacturers were instructed to supply ammonia to concerns only in such quantities as would permit them to

¹ See final report of Food Administration 1918, *ibid*.

² As shown in the appended table, based on data from the United States Department of Commerce, American imports of ammonia (muriate) suffered a large decrease during the early years of the war. Receipts for 1917 were less than half the size of those of 1913, while the acute situation of 1918 virtually eliminated them:

Calendar year.	Pounds.	Calendar year.	Pounds.	Calendar year.	Pounds.
1913.....	9,019,418	1915.....	2,542,592	1917.....	2,146,549
1914.....	7,841,546	1916.....	1,653,354	1918.....	284,964

³ This committee was made up of representatives of the War Department, Navy Department, Department of Agriculture, Department of the Interior, the War Industries Board, and the Food Administration.

⁴ Although the licensing of the ammonia industry was put into the hands of the Food Administration, the enforcement of the regulations promulgated was theoretically intrusted to the Department of Agriculture. However, the interdepartmental ammonia committee really enforced the rules which were put into effect.

operate their plants with a maximum degree of efficiency. Moreover, monthly consumption reports were required from each ice and refrigeration plant by means of which a careful check was kept upon consumption. Where there appeared undue use by a concern, the manufacturer who supplied the ammonia was notified to refuse to make further deliveries unless evidence was furnished that wasteful methods would be discontinued.

The efficacy of the price control over ammonia seems striking after comparing the price of ammonia in the year 1918 with prices in general. The extraordinary feature of the control is that a stable price was maintained during a season "at the outset of which we were faced with an apparent shortage of 60,000,000 pounds." This control is notable in the degree of informal control which obtained before ammonia was put under license. The price of ammonia, liquid, anhydrous, in cylinders, at New York, held at 25 cents per pound during the war until August, 1917, when it rose to 30 cents and stayed there through 1918.

The conservation measures inaugurated in the refrigerating and ice-producing industries in the winter of 1917-18 resulted in harvesting more natural ice, and the spring of 1918 found one of the largest ice crops ever stored in the United States. There was no reason to fear any acute shortage then, but because of the importance of ice to the food program it was deemed advisable to see that ice prices did not exceed a nominal level in the various parts of the country. The industry was never put under license, but supervision was maintained throughout the summer of 1918. It was obviously impossible for the central office of the Food Administration to administer control over the almost limitless array of ice distributors, especially when no one of them was subject to any direct regulations, and when no one of them made any reports as to his methods of doing business or as to the prices charged for his commodity. The supervision over ice prices was placed in the hands of the Federal food administrators for the various States, with instructions that they keep under control the ice prices in their industrial districts. Price increases were investigated by these officials, and with them was left the task of determining the reasonableness of price advances in the territory that came under their jurisdiction. The theory applied in making such decisions was that "as far as possible the burden of any necessary increase should fall upon the large users rather than upon the small household consumer."¹

Arsenic.—The extraordinary demands for insecticides in the production of which the greater part of the domestic output of arsenic is consumed, together with the needs of glass producers, resulted in

¹ Final report of the Food Administration, 1918.

a spectacular rise in the price of arsenic even before the United States entered the war. Under the stimulus of this large demand the American production of arsenic increased rapidly during the war, and in 1917 the output amounted to 6,151 tons, as against 2,513 tons in 1913, an increase of approximately 150 per cent. But this increased output was by no means commensurate with the growing demands of the country, and by late 1916 a shortage was threatening. In December, 1916, arsenic was selling at a price 134 per cent higher than the average prewar level. The American entrance into the war accentuated the difficulties of the situation, and arsenic prices began soaring to unprecedented levels. By September, 1917, arsenic had reached a point 481 per cent above its average for 1913-14.

Apart from the rise in price, moreover, the insecticide producers were complaining of their inability to secure arsenic. This condition had a direct bearing upon the food situation, and on November 15 a proclamation was issued which required all those engaged in importing, manufacturing, storing, and distributing white arsenic or engaged in the manufacture of insecticides containing arsenic to take out licenses within five days. Regulations were issued similar to those which were promulgated in the case of foodstuffs, and provisions were made for the securing of reports from licensees which showed the state of affairs in the industry. Measures were also enforced which aimed at the elimination of hoarding, the prohibition of unreasonable profits, the prevention of waste, and the diversion of arsenic from less to more essential uses; and sales to others than manufacturers of insecticides, medicines, and such products as were required by the United States Government were forbidden, unless specially authorized by the Food Administration.¹ Moreover, the price situation was immediately investigated, and on February 23 the producer's price of white arsenic was virtually fixed at a maximum of 9 cents per pound delivered at any point in the United States in carload lots.² This price was a cut of almost 50 per cent from the market price of 16.5 cents for the preceding month. It appears, however, that this new low price was not reflected universally in the consumer's price, since they were known to be paying as high as 30 cents per pound for small lots.³

The trade was therefore notified, on April 4, that the price of arsenic to the consumers would have to be considerably lowered, and a margin of one-fourth cent per pound was declared to be a fair return

¹ This latter regulation, it will be noted, made it illegal to sell arsenic without permission of the Food Administration to glass producers, who were normally large consumers.

² An extra half cent per pound was allowed for less than carload lots.

³ Review of Control of Arsenic and Arsenical Insecticides. Files of U. S. Food Administration.

to dealers who sold in carload lots. In this way the selling price of arsenic to consumers was fixed.¹

The Army was daily increasing its demands for arsenic, both for airplane "dope" and poison gas, and by the middle of the summer of 1918 their needs were estimated at 6,400 tons for the coming 12 months. Added to this were the British requirements of 2,000 tons, making the military needs of the country 8,400 tons. As stated above, however, our total output of 1917 was equal only to 6,151 tons, and this amount, it was estimated, would be increased through new production facilities by some 2,000 tons. Therefore, our entire domestic production would barely meet our military demands. Investigation into other possible sources showed that if we included all our stocks and such supplies as were available in Canada we might possibly count on a maximum of 14,400 tons for the year ending July, 1919. There would then be available for agricultural and other uses about 6,000 tons. Of this, 1,000 tons had already been delivered to producers of sheep dips and glass. Our requirements of 1917-18 had been approximately 11,300 tons, of which 8,000 had gone into agricultural uses, 2,000 into the manufacture of glass, and 1,300 into the drug industry and other miscellaneous uses. It appeared, therefore, that there would not be sufficient arsenic to supply even our agricultural needs.

Curtailment of uses as far as possible was then the only logical remedy and immediately all deliveries of arsenic for the manufacture of glass were stopped. Economies were also enforced in the manufacture of sheep dips and Paris green, and substitutes were used wherever possible.² The situation finally was relieved, and not only were the war needs met but also those of the insecticide manufacturers.

UNLICENSED CONTROL OVER COMMODITIES AT RETAIL.

One of the two distinct handicaps to complete control over foods which the Food Administration had to face at the outset was that clause in the act which exempted dealers in foods at retail from license control when their gross sales fell below \$100,000 annually.³ But so firmly did the Food Administrator believe that Congress was in error upon that point that the Food Administration set about immediately to control the retail trade by other methods. It seemed

¹ Other margins were fixed for sales by dealers who sold in small quantities. An additional three-fourths cent per pound was allowed for sales which were above 20,000 pounds but less than a carload; 1 cent for sales ranging from 5,000 to 20,000 pounds; 2 cents for quantities varying from 1 keg to 5,000 pounds; and 3 cents for sales of less than 1 keg.

² Special regulations issued by the Food Administration on Oct. 24, 1918, forbade the sale or delivery of white arsenic of certain strength to any person for the manufacture of sheep or cattle dips, and on Oct. 31 licensees were forbidden to use white arsenic in the manufacture of sheep or cattle dips without the special permission of the Food Administration.

³ The other handicap was the exemption of producers and producers' associations.

patent to high officials in the administration of food control that if both ends of the channels of distribution were left uncontrolled (that is, the producing and the retailing ends) the consumer would after all have no protection against exorbitant charges by retailers. The law, they reasoned, by its specific exemption might even seem to encourage high prices. The class of retailers exempted by the act, moreover, embraced more than 95 per cent of the total number of retailers in the United States. Since the penalties for violations of the broad grants of power under section 4 seemed of doubtful character, the Food Administration abandoned hope of enforcing its rules upon retailers directly, and worked out schemes to enforce them indirectly and despite the act. It soon came into a considerable control over the retail prices of foods through pressure by the wholesale licensees, the organization of the retail trade, a check upon retail prices by consumers' reports, and the publication of "fair price" lists.

Indirect control through licensees.—The most ingenious scheme by which the Food Administration brought the great body of unlicensed retailers under control was by a control of their supplies which came from the licensed wholesalers.¹ The Food Administration could grant or withdraw licenses at discretion and was in a position, therefore, to prohibit licensees from selling food commodities to dealers who violated the food control act. It, with that in mind, set up the so-called rule 17 of the General License Regulations which became the basis of control over the retail trade. The rule provided that—

The licensee shall not knowingly sell any food commodities to any persons engaged in the business of selling such commodities who shall after this regulation goes into effect violate the provisions of the act of Congress approved August 10, 1917, by making any unreasonable rate or charge in selling or otherwise handling or dealing in such commodities, or by holding, contracting for, or arranging for a quantity thereof in excess of the reasonable requirements of his business for use or sale by him for a reasonable time.

The enforcement of rules for retailers, set up upon the basis of this authority, entailed such difficulties as giving notice to all licensees not to sell any supplies to a particular retail violator. Retail dealers who were caught hoarding or exacting excessive profits, however, preferred generally to submit to penalties rather than allow the Food Administrator to notify licensees, cut off supplies, and put a ban upon their business. The directions which were issued for the guidance of retailers required that merchants sell certain commodities, including virtually the staple articles, at not more than a reasonable advance over the actual purchase price without

¹ Dr. Albert N. Merritt, in his final report of the Distribution Division, ventures the opinion that this indirect method brought the unlicensed retailer under food control almost to the same extent as the licensee.

regard to the market or replacement value;¹ not more than 30 days' supply of sugar or flour should be kept on hand, or more than 60 days' supply of certain other foods; not more than one-eighth barrel of flour should be sold to a person residing in a city, or more than one-quarter barrel to a person residing in a farming community; not more than 2 to 5 pound quantities of sugar should be sold to persons in a city, or more than 5 to 10 pounds to those in a farming community; not more than 60 days' supply of other foods should be sold to any customer; wheat flour should not be sold unless the customer bought an equal amount of wheat substitutes; and that combination sales must not be made except that sugar may be sold in combination with corn meal, and wheat flour must not be sold except with wheat flour substitutes.² The retail dealer was subjected to the same cost basis rule as the jobber, and finally there were established for him maximum margins covering many of the more important licensed commodities.³

The organization of the retail trade.—It is not odd, since the Food Administration felt so much need for cooperation from the wholesale trade, that it also desired that of the retail trade. About the middle of October, 1917, therefore, a conference was held at Washington with representative retailers throughout the country. After that conference the representatives voluntarily drew up resolutions pledging the retail trade, whether licensed or unlicensed, to the rules of the Food Administration and forwarded 3,000,000 copies to the retailers through their jobbers.⁴ Virtually every retailer, then, re-

¹ That list included wheat flour, rye flour, barley flour, oatmeal, rolled oats, corn grits, corn meal, hominy, corn flour, cornstarch, corn oil, corn sirup, cleaned rice, rice flour, oleomargarine, lard, lard substitutes, oleo oil, cooking fats, condensed milk, evaporated milk, powdered milk, fresh, canned, or cured beef, pork or mutton, canned peas, canned dried beans, canned tomatoes, canned corn, canned salmon, canned sardines, dried prunes, dried apples, dried peaches, dried raisins, sugar, sirups, molasses, clarified sugar, plantation washed sugar, open-kettle sugar, dried beans, dried peas, cotton seed, cottonseed oil, cottonseed cake, cottonseed meal, peanut oil, soya-bean oil, palm oil, copra oil, peanut meal, soya bean meal, and feeds of all kinds.

² These rules may be found more in detail in "Directions for Guidance of Persons Engaged in Distributing Food Commodities at Retail," issued Mar. 25, 1918.

³ A full discussion of retail maximum margins appeared earlier in the chapter under "Policies of the Food Administrator."

⁴ A brief digest of the 15 resolutions drawn up on Oct. 17, 1917, by representatives of the retail trade and recommending retailers to pledge themselves to the Food Administration rules follows: 1. Cooperation with Food Administration by retail trade whether licensed or not. 2. Discontinuance of order solicitations during the war. 3. Limitation of deliveries to 1 a day to any family or route. 4. Cooperative system of delivery. 5. Selling of substitutes for flour and meat. 6. Urge sale of cheaper foods of good quality recommended by the Conservation Division. 7. Practice economy and give "consumers the lowest possible prices." 8. All retailers and retailers' associations should write their promise of support to the Food Administration. 9. Solicitation of trade papers. 10. Urge sale of potatoes. 11. Sale of foods by weight and for cash. 12. Sale of such foods as prunes, corn meal, oat meal, rice, and hominy in bulk. 13. Push the sale of soup stock, peas, rice, barley, fresh vegetables, and oysters. 14. Pledge to a reasonable living margin of profit, "irrespective of the market conditions at the time of resale," and such profits not to be greater than under prewar conditions. 15. The enlistment of all individual retail grocers and associations of retail grocers.

ceived this notice from the wholesaler who furnished him with supplies. The patriotism of the retailer was appealed to through the press, traveling salesmen of wholesale grocers, boards of trade, retail trade associations, and through conferences between local representatives of the Food Administration; and a national pledge campaign resulted in the distribution of some 430,000 copies of the retailers' pledge poster.

The consumers' reports.—One of the most effective checks upon so-called retail profiteering, and one which was begun soon after the creation of the Food Administration and was continued to the end of the war, was the confidential weekly reports of retail prices by consumers. The Food Administration, by aid of the Comptroller of the Currency, who sent out circular letters to the banks of the country, made up a list of reliable reporters throughout the country who reported regularly prices which had been quoted in their community on one or the other of 28 staple commodities (wheat flour; wheat bread; cornmeal, bulk; oatmeal, bulk; rice; steak, round; bacon, sliced; ham, sliced; pork chops; lard; milk; butter; oleomargarine; cheese; eggs; sugar; potatoes; beans, navy; onions; prunes; tomatoes; peas; corn; salmon; fish; hens, tea; coffee) without the knowledge of the retailer that the quotations would be sent to the Food Administration.¹ The first weekly reports, in the week of October 6, 1917, were received from 839 reporters representing 798 towns and cities. On September 28, 1918, which marked the close of a year of 52 weeks, the work had so increased that reports were received from 1,871 reporters representing 1,305 towns and cities.

These reports, showing actual retail prices being paid by consumers, were followed closely by the Food Administration and served as signals to special investigations when the weekly chain index showed an extraordinary rise over the week preceding, when there appeared peculiar discrepancies in price between various cities or States, when there was a wide variance with the prices on the "fair price" list, when peculiarities appeared by comparisons with a list of corresponding weekly retail prices in Canada which were sent by the Canadian Food Administration, or when the weekly relative prices (figured upon the base October, 1917, as equal to 100) showed unusual rises away from the earlier level.

The "fair price" lists.—It early occurred to the Food Administration that an especially effective control over retail prices could be had through checking weekly retail prices "actually paid" by the consumer against those which he "should pay." The setting up of the system of consumers' reports to watch retail prices "actually

¹ These reporters were selected women of the town usually, such as the wives of ministers, bankers, and professional men, and who took interest in helping the Food Administration in its plan of checking retail prices.

paid," as has been said, was put well under way by the fall of 1917, but the full machinery for determining retail prices that consumers "should pay" and the publication of those fair-price lists did not become effective until nearly a year later. The whole undertaking was a tremendous one because it proposed to announce each week what prices were and what prices should have been for any one of thirty-odd food staples at retail in the various markets throughout the country.

The embryo of what developed into the final plan was started in mid-fall of 1917 when all Federal food administrators were asked to announce fair prices in a manner similar to that conceived originally by the Illinois food administrator.¹ It meant simply an understanding with the retail distributors by which they voluntarily agreed upon a reasonable and fair margin for the sale of certain licensed goods. The costs to the retailer and the prices to the consumer were to be published. The published prices generally represented two maxima, one for the retailer with high cost and the other for the retailer with less service and lower cost.

But during 1918 there came a change in this informal method, which started the organization of so-called interpreting boards in every county of the country to determine fair prices. The county food administrator was made chairman of his interpreting board composed of representative wholesale grocers, retailers, and consumers. These boards met in their respective localities and, by aid of maximum margins furnished them by the Food Administration, determined fair and reasonable retail prices. It was left to each board simply to find the cost to the retailer, add the margins sent it by the Food Administration, and publish the results as "fair prices." Again there were two maximum prices published—one for cash-and-carry stores and one for credit-and-delivery stores. The Food Administration grew more and more courageous in its dealing with the retail problem and on November 7, 1918, published its list of maximum retail margins as mandatory rules and regulations to be used in retail price interpretation. Gradually a particular man was made responsible for this work in each State and 1,200 local committees were appointed to meet at least once each week. These committees determined prices applicable for their respective localities, upon the basis of the new maximum margins allowable, and pushed vigorously the publication of their "fair prices" thus found. The "fair price" lists when received by the Food Administration at Washington were

¹ The Federal food administrator of Illinois, as early as October, 1917, set forth a plan in his State for retail control through the publication of fair prices. It provided that publicity be given to the prices which the retailers were paying the wholesalers for a few staple foods and corresponding fair retail selling prices. The fair selling prices were determined upon the basis of cost to the retailer and in agreement with a committee of the retail trade.

carefully compared with the prices shown on the consumers' reports for those same localities.

The weekly reports of retail prices "actually paid," appearing upon the consumers' reports, show variations so nearly like those that the interpreting boards said the consumers "should pay," appearing upon the "fair price" lists, that, the Distribution Division states, in its final report, "prices * * * had been stabilized to such a degree that the difference in freight constituted practically the only difference between average prices paid by the consumers in different parts of the country." That conclusion does not, of course, bear upon the question whether the maximum margins set by the Food Administration, and upon which "fair price" lists were built throughout the country, were too low or too high.

It is well worth showing into what statistical form these thousands of consumers' reports and "fair price" lists were put that they might be made ready and useful checks, the one upon the other. An analysis of a single one of these weekly confidential "fair price" bulletins, perhaps, would give an adequate picture of the plan and a measure of its real significance. The regular weekly bulletin for the week ending just prior to the signing of the armistice, prepared for limited distribution within the Food Administration, compares 30 odd retail prices which consumers "should pay" (representing "fair prices" sent in on 366 reports from 41 States) with corresponding retail prices "actually paid" (taken from 1,686 consumers' reports). It states in summary:

This summary shows that, during the week's period from November 2 to November 9, the aggregate cost of the 29 food staples decreased 0.9 cent, or one-tenth of 1 per cent, according to "fair prices," and increased 3.3 cents, or 0.4 per cent, as shown by our corps of volunteer reporters. The cost of this group of foodstuffs on November 2, was \$8.891 and on November 9, \$8.882, as published by the fair price committees; while according to prices actually paid, the cost was \$8.935 on November 2 and \$8.968 on November 9. This comparison shows that, on November 2, these combined staples cost the consumer 4.4 cents more than the aggregate cost as reported by "fair prices," and on November 9, 8.6 cents more.

It would seem doubtful whether that generalization is as useful, if as accurate, as some that may well be made from the comparative tables of individual retail prices which consumers "should pay" and which they "actually paid." The "fair prices" allowable increased during the week on 14 items, decreased on 15 items, and remained stationary on 6 items. The consumer-reporter prices increased on 14 items, decreased on 14 items, and remained stationary on 7 items. Curiously, while the "fair price" allowable for corn meal (packages) was increased over the country 5.6 per cent during the week, the consumer-reporter prices showed that the price actually charged fell off 1.37 per cent. On the other hand, while the price

allowable for potatoes fell off 0.8 per cent, the price being charged increased generally 2.2 per cent. These analyses, when supported by their detailed comparisons by States, made graphic the week-to-week discrepancies. A summary comparison follows of commodities at retail, weighted according to population, showing averages of prices that consumers "should pay" (known as "fair prices" and calculated from margins by interpreting boards), with prices that consumers "actually paid" (known as consumer-reporter prices) within 41 States, for the week ended November 2, with those for the week ended November 9, 1918.

A COMPARISON OF AVERAGE FAIR PRICES WITH CONSUMER-REPORTER PRICES IN THE UNITED STATES FOR THE WEEK PRIOR TO THE SIGNING OF THE ARMISTICE.

Commodities.	Unit.	Fair prices.			Consumer-reporter prices.		
		Week ended—		Per cent of increase(+) or decrease(-).	Week ended—		Per cent of increase(+) or decrease(-).
		Nov. 2.	Nov. 9.		Nov. 2.	Nov. 9.	
Wheat flour.....	$\frac{1}{2}$ barrel.....	\$0.820	\$0.816	-0.5	\$0.831	\$0.828	-0.4
Do.....	Pound.....	.070	.070	.....	.072	.073	+1.4
Victory bread.....	24 ounces.....	.146	.146	.....	.149	.148	-0.7
Do.....	16 ounces.....	.099	.099	.....	.099	.098	-1.0
Barley flour.....	Pound.....	.070	.071	+1.4	.077	.076	-1.3
Sugar.....	do.....	.109	.108	-0.9	.107	.108	+0.9
Corn meal, bulk.....	do.....	.062	.061	-1.6	.066	.066	-1.5
Corn meal, package.....	do.....	.071	.075	+5.6	.076	.075	-1.3
Oatmeal, bulk.....	do.....	.079	.080	+1.3	.081	.080	-1.2
Oatmeal, package.....	do.....	.103	.103	.....	.103	.102	-1.0
Rice.....	do.....	.139	.139	.....	.139	.139	.....
Hominy or grits.....	do.....	.086	.085	-1.2	.089	.088	-1.1
Potatoes.....	Peck.....	.495	.491	-0.8	.495	.506	+2.2
Tomatoes.....	No. 2 can.....	.181	.179	-1.1	.175	.175	.....
Peas.....	do.....	.193	.196	+1.5	.191	.191	.....
Corn.....	do.....	.195	.199	+2.1	.189	.189	.....
Salmon, tall pink.....	No. 1 can.....	.236	.235	-0.4	.238	.237	-0.4
Salmon, tall red.....	do.....	.317	.320	+0.9	.313	.313	.....
Evaporated milk.....	6-ounce can.....	.076	.079	+3.9	.075	.075	.....
Do.....	16-ounce can.....	.156	.158	+1.3	.148	.150	+1.3
Milk.....	Quart.....	.139	.137	-1.4	.142	.143	+0.7
Butter.....	Pound.....	.645	.650	+0.8	.640	.645	+0.8
Cheese.....	do.....	.414	.417	+0.7	.395	.399	+1.0
Oleomargarine.....	do.....	.386	.389	+0.8	.381	.382	+0.3
Eggs, fresh.....	Dozen.....	.581	.597	+2.7	.605	.622	+2.8
Steak, round.....	Pound.....	.385	.348	-9.6	.374	.373	-0.3
Bacon, sliced.....	do.....	.566	.563	-0.5	.571	.574	+0.5
Pork chops.....	do.....	.409	.408	-0.2	.415	.413	-0.5
Ham, sliced.....	do.....	.493	.499	+1.2	.519	.520	+0.2
Lard.....	do.....	.345	.341	-1.1	.341	.339	-0.6
Lard substitutes.....	do.....	.284	.291	+1.0	.291	.292	+0.3
Onions.....	do.....	.043	.043	.....	.048	.047	-2.1
Beans, white.....	do.....	.161	.159	-1.2	.166	.166	.....
Prunes.....	do.....	.171	.170	-0.6	.177	.178	+0.6
Raisins, seeded.....	do.....	.158	.160	+2.6	.157	.159	+1.3
Aggregate.....	.....	8.891	8.882	-0.1	8.935	8.968	+0.4

A comparison of retail prices.—It is particularly interesting, by reason especially of the various roundabout methods used, to know how far the Food Administration got in its control over retail prices. There are, of course, no data available to give a precise statistical measure of the effect of the above controls upon retail prices. Of all its regulations, those over the retailer were by necessity the most

nebulous. But from a study of the prices of commodities at retail it is possible to see how they moved with respect to each other, and to judge whether or not the more highly controlled foods showed greater stabilization. That comparison makes obvious some generalizations which are quite legitimate and striking.

A COMPARISON OF THE PRICES OF 28 COMMODITIES AT RETAIL FROM OCTOBER, 1917, TO DECEMBER, 1918.

	Wheat flour.		Wheat bread.		Corn meal, bulk.		Oatmeal.		Rice.	
	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.
Months:										
1917—October.....	\$0.848	100	\$0.108	100	\$0.068	100	\$0.089	100	\$0.110	100
November.....	.834	98	.107	99	.068	100	.088	99	.111	101
December.....	.823	97	.103	95	.068	100	.087	98	.112	102
1918—January.....	.821	97	.103	95	.068	100	.088	99	.114	104
February.....	.818	96	.102	94	.068	100	.087	98	.116	105
March.....	.825	97	.102	94	.069	101	.088	99	.118	107
April.....	.823	97	.100	93	.069	101	.091	102	.119	108
May.....	.824	97	.100	93	.069	101	.092	103	.119	108
June.....	.827	98	.100	93	.066	97	.086	97	.124	113
July.....	.831	98	.099	92	.066	97	.085	96	.128	116
August.....	.837	99	.099	92	.066	97	.085	96	.133	121
September.....	.837	99	.099	92	.066	97	.085	96	.135	123
October.....	.833	98	.099	92	.066	97	.085	96	.138	125
November.....	.826	97	.098	91	.065	96	.081	91	.139	126
December.....	.819	97	.098	91	.063	93	.080	90	.138	125
Quarters:										
1917—Fourth.....	.836	99	.106	98	.068	100	.088	99	.111	101
1918—First.....	.821	97	.102	94	.068	100	.088	99	.116	105
Second.....	.824	97	.100	93	.068	100	.090	101	.120	109
Third.....	.835	98	.099	92	.066	97	.085	96	.131	119
Fourth.....	.826	97	.098	91	.065	96	.082	92	.138	125
	Steak, round.		Bacon, sliced.		Ham, sliced.		Pork chops.		Lard.	
	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.
Months:										
1917—October.....	\$0.293	100	\$0.472	100	\$0.404	100	\$0.369	100	\$0.312	100
November.....	.289	99	.480	102	.406	100	.351	95	.325	104
December.....	.289	99	.485	103	.410	101	.346	94	.332	106
1918—January.....	.294	100	.490	104	.415	103	.347	94	.332	106
February.....	.299	102	.491	104	.419	104	.343	93	.333	107
March.....	.304	104	.483	102	.419	104	.341	92	.332	106
April.....	.323	110	.491	104	.428	106	.349	95	.333	107
May.....	.350	119	.497	105	.437	108	.358	97	.332	106
June.....	.375	128	.509	108	.460	114	.368	100	.329	105
July.....	.376	128	.514	109	.469	116	.373	101	.328	105
August.....	.376	128	.527	112	.483	120	.394	107	.331	106
September.....	.381	130	.544	115	.502	124	.421	114	.335	107
October.....	.379	129	.565	120	.515	127	.429	116	.340	109
November.....	.373	127	.574	122	.518	128	.413	112	.340	109
December.....	.372	127	.581	123	.527	130	.404	109	.340	109
Quarters:										
1917—Fourth.....	.291	99	.478	101	.406	100	.356	96	.322	103
1918—First.....	.299	102	.488	103	.417	103	.344	93	.332	106
Second.....	.349	119	.499	106	.441	109	.358	97	.331	106
Third.....	.378	129	.527	112	.483	120	.394	107	.331	106
Fourth.....	.375	128	.573	121	.520	129	.415	112	.340	109

The Food Administration really did not get started upon its control over retail prices until after October, 1917. There have been put into statistical form, therefore, the retail prices "actually paid" by over 1,000 consumers at various markets throughout the country,

from October, 1917, to December, 1918. The accompanying tables show the movement of actual prices from October 28 of the most important food staples at retail. The comparison is expedited by the presentation, alongside the actual prices, of relative prices figured with the October, 1917, actual price taken as a base equal to 100.

	Milk.		Butter.		Oleomargarine.		Cheese.		Eggs.	
	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.
Months:										
1917—October.....	\$0.118	100	\$0.510	100	\$0.343	100	\$0.350	100	\$0.491	100
November.....	.123	104	.511	100	.349	102	.347	99	.527	107
December.....	.126	107	.527	103	.353	103	.352	101	.561	114
1918—January.....	.127	108	.547	107	.356	104	.352	101	.609	124
February.....	.127	108	.557	109	.358	104	.356	102	.554	112
March.....	.128	108	.533	105	.351	102	.353	101	.397	81
April.....	.127	108	.503	99	.352	103	.249	100	.383	78
May.....	.127	108	.500	98	.351	102	.346	99	.384	78
June.....	.126	107	.502	98	.350	102	.341	97	.391	79
July.....	.127	108	.515	101	.352	103	.342	98	.430	87
August.....	.129	109	.531	104	.354	103	.349	100	.467	95
September.....	.132	112	.579	114	.361	105	.360	103	.510	103
October.....	.139	118	.636	125	.374	109	.382	109	.561	114
November.....	.144	122	.650	127	.382	111	.401	115	.634	129
December.....	.146	124	.696	136	.386	113	.420	120	.706	143
Quarters:										
1917—Fourth.....	.122	103	.516	101	.348	101	.350	100	.524	106
1918—First.....	.127	108	.546	107	.355	103	.354	101	.527	107
Second.....	.127	108	.501	98	.351	102	.345	99	.386	78
Third.....	.129	109	.540	106	.355	103	.350	100	.466	95
Fourth.....	.143	121	.661	130	.381	111	.401	115	.634	129
	Sugar.		Potatoes.		Beans, navy.		Onions.		Prunes.	
	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.
Months:										
1917—October.....	\$0.098	100	\$0.434	100	\$0.188	100	\$0.051	100	\$0.173	100
November.....	.099	101	.449	103	.185	98	.051	100	.172	99
December.....	.098	100	.441	102	.184	98	.052	102	.170	98
1918—January.....	.097	99	.444	102	.184	98	.053	104	.170	98
February.....	.096	98	.436	100	.190	99	.053	104	.169	98
March.....	.094	96	.392	90	.182	97	.049	96	.169	98
April.....	.093	95	.336	77	.180	96	.045	88	.169	98
May.....	.093	95	.322	74	.178	95	.050	98	.169	98
June.....	.093	95	.456	105	.176	94	.055	108	.164	95
July.....	.094	96	.596	137	.173	92	.057	112	.165	95
August.....	.095	97	.567	131	.173	92	.057	112	.168	97
September.....	.099	101	.575	132	.171	91	.055	108	.171	99
October.....	.106	108	.537	124	.168	89	.050	98	.175	101
November.....	.106	110	.496	114	.164	87	.047	92	.177	102
December.....	.109	111	.481	111	.159	85	.045	88	.179	103
Quarters:										
1917—Fourth.....	.099	101	.440	101	.186	99	.051	100	.172	99
1918—First.....	.096	98	.426	98	.182	97	.052	102	.169	98
Second.....	.093	95	.332	77	.178	95	.050	98	.168	97
Third.....	.096	98	.580	134	.172	91	.056	110	.168	97
Fourth.....	.108	110	.505	116	.164	87	.047	92	.177	102

The eye is caught at once by the striking differences in the movement of the cereals, which were highly controlled, and the meats, which were not highly controlled. The prices of wheat flour, wheat bread, corn meal in bulk, and oatmeal in bulk hold strikingly near, or even below, their level at the time retail control set in. The

prices of round steak, sliced bacon, sliced ham, and pork chops, on the other hand, all show marked rises during the same period. Beans, which were highly controlled, receded from their earlier level. Sugar, which was highly controlled from the outset, main-

	Tomatoes.		Peas.		Corn.		Salmon.	
	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.
Months—								
1917 October.....	\$0.168	100	\$0.177	100	\$0.177	100	\$0.271	100
November.....	.165	98	.176	99	.173	98	.271	100
December.....	.161	96	.175	99	.171	97	.274	101
1918 January.....	.162	96	.177	100	.171	97	.275	101
February.....	.163	97	.177	100	.171	97	.277	102
March.....	.165	98	.175	99	.170	96	.272	100
April.....	.166	99	.178	101	.172	97	.274	101
May.....	.167	99	.178	101	.173	98	.277	102
June.....	.163	97	.177	100	.172	97	.293	108
July.....	.166	99	.178	101	.174	98	.298	110
August.....	.169	101	.181	102	.177	100	.301	111
September.....	.172	102	.185	105	.181	102	.305	113
October.....	.175	104	.189	107	.186	105	.310	114
November.....	.176	105	.191	108	.189	107	.314	116
December.....	.178	106	.193	109	.189	107	.317	117
Quarters—								
1917—Fourth.....	.165	98	.176	99	.174	98	.272	100
1918—First.....	.163	97	.177	100	.171	97	.274	101
Second.....	.165	98	.177	100	.172	97	.281	104
Third.....	.169	101	.181	102	.177	100	.301	111
Fourth.....	.176	105	.191	108	.188	106	.314	116

	Fish.		Hens.		Tea.		Coffee.	
	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.
Months—								
1917 October.....	\$0.231	100	\$0.284	100	\$0.617	100	\$0.318	100
November.....	.234	101	.279	98	.618	100	.317	100
December.....	.242	105	.283	100	.629	102	.319	100
1918 January.....	.257	111	.298	105	.627	102	.320	101
February.....	.261	113	.323	114	.631	102	.319	100
March.....	.257	111	.342	120	.621	101	.306	96
April.....	.252	109	.350	123	.625	101	.305	96
May.....	.244	106	.341	120	.630	102	.305	96
June.....	.241	104	.340	120	.622	101	.288	91
July.....	.249	108	.343	121	.625	101	.284	89
August.....	.249	108	.349	123	.630	102	.284	89
September.....	.255	110	.351	124	.636	103	.284	89
October.....	.255	110	.353	124	.646	105	.285	90
November.....	.256	111	.353	124	.653	106	.288	91
December.....	.261	113	.352	124	.653	106	.298	94
Quarters—								
1917—Fourth.....	.235	102	.282	99	.621	101	.318	100
1918—First.....	.258	112	.319	112	.626	101	.315	99
Second.....	.246	106	.344	121	.626	101	.300	94
Third.....	.251	109	.347	122	.630	102	.284	89
Fourth.....	.257	111	.353	124	.651	106	.290	91

The above series of retail prices are averages of prices "actually paid" by consumers, made from confidential reports to the United States Food Administration by from 839 to 2,076 consumer-reporters, representing from 798 to 1,429 cities and towns of the country.

tained its early level strictly until the fall of 1918. The highly controlled canned goods, tomatoes, peas, and corn, held closely to their October, 1917, levels. But, on the other hand, rice, the dairy products (milk, butter, cheese), and eggs moved in varying degrees away from their respective bases. It remains for each to in-

interpret the movement of these retail prices as he will. But it seems distinctly clear that the highly controlled retail commodities, in the main, showed a considerable stabilization in price control after October, 1917.

Retail prices in United States and Canada.—A regular check was kept, too, of the comparative movements of these 28 staple foods at retail in this country with corresponding ones in Canada. There is given below a comparison of average retail prices for the week ended October 6, 1917, with those for the week ended September 28, 1918 (one year later), showing percentages of increase or decrease for the United States and Canada. This table has value in the comparison which it affords both of rises and falls in price on the last of September, 1918, over quotations on that date a year previous within each country, and of the corresponding rises and falls between the two countries. The price for the weeks quoted seemed related closely enough to the prevailing price of that period to make this sampling process not wholly without significance. If the articles for which Canadian quotations are lacking be omitted from the American list also, the increase in total cost is 7.9 per cent in this country as against 12.3 per cent in Canada.

A COMPARISON OF RETAIL PRICES IN THE UNITED STATES AND CANADA.

Commodities.	Unit.	United States.				Canada.			
		Week ended—		Increase (+) or decrease (—).		Week ended—		Increase (+) or decrease (—).	
		Oct. 6, 1917.	Sept. 28, 1918.	Absolute.	Per cent.	Oct. 6, 1917.	Sept. 28, 1918.	Absolute.	Per cent.
Wheat flour.....	½ barrel..	\$0.869	\$0.837	—\$0.032	— 3.7	\$0.834	\$0.815	—\$0.019	— 2.3
Wheat bread.....	Pound....	.109	.099	— .010	— 9.2	.072	.079	+ .007	+ 9.7
Corn meal, bulk.....	do.....	.068	.066	— .002	— 2.9	(¹)	(¹)	(¹)	(¹)
Oatmeal, bulk.....	do.....	.089	.084	— .005	— 5.6	.065	.080	+ .015	+ 23.1
Rice.....	do.....	.109	.136	+ .027	+ 24.8	.092	.121	+ .029	+ 31.5
Steak, round.....	do.....	.291	.381	+ .090	+ 30.9	.286	.347	+ .061	+ 21.3
Bacon, sliced.....	do.....	.462	.554	+ .092	+ 19.9	.451	.535	+ .084	+ 18.6
Ham, sliced.....	do.....	.397	.509	+ .112	+ 28.2	(¹)	(¹)	(¹)	(¹)
Pork chops.....	do.....	.368	.430	+ .062	+ 16.8	.335	.398	+ .063	+ 18.8
Lard.....	do.....	.308	.336	+ .028	+ 9.1	.312	.369	+ .057	+ 18.3
Milk.....	Quart....	.116	.133	+ .017	+ 14.7	.105	.101	— .004	— 3.8
Butter.....	Pound....	.511	.619	+ .108	+ 21.1	.495	.525	+ .030	+ 6.1
Oleomargarine.....	do.....	.324	.367	+ .043	+ 13.3	(¹)	(¹)	(¹)	(¹)
Cheese.....	do.....	.348	.368	+ .020	+ 5.7	.302	.307	+ .005	+ 1.7
Eggs.....	Dozen....	.482	.529	+ .047	+ 9.7	.514	.554	+ .040	+ 7.8
Sugar.....	Pound....	.098	.102	+ .004	+ 4.1	.106	.119	+ .013	+ 12.3
Potatoes.....	Peck.....	.419	.572	+ .153	+ 36.5	(¹)	(¹)	(¹)	(¹)
Beans, navy.....	Pound....	.187	.170	— .017	— 9.1	.165	.168	+ .003	+ 1.8
Onions.....	do.....	.049	.053	+ .004	+ 8.2	(¹)	(¹)	(¹)	(¹)
Prunes.....	do.....	.171	.173	+ .002	+ 1.2	.159	.183	+ .024	+ 15.1
Tomatoes.....	No. 2 can..	.168	.173	+ .005	+ 3.0	.141	.170	+ .029	+ 20.6
Peas.....	do.....	.175	.187	+ .012	+ 6.9	.160	.202	+ .042	+ 26.3
Corn.....	do.....	.175	.183	+ .008	+ 4.6	.189	.245	+ .056	+ 29.6
Salmon.....	No. 1 can..	.272	.308	+ .036	+ 13.2	.264	.330	+ .066	+ 25.0
Fish.....	Pound....	.227	.256	+ .029	+ 12.8	.180	.174	— .006	— 3.3
Hens.....	do.....	.279	.347	+ .068	+ 24.4	(¹)	(¹)	(¹)	(¹)
Tea.....	do.....	.616	.640	+ .024	+ 3.9	.493	.609	+ .116	+ 23.5
Coffee.....	do.....	.318	.284	— .034	— 10.7	.405	.451	+ .046	+ 11.3
Aggregate,.....		8.005	8.896	+ .891	+ 11.1	6.125	6.882	+ .757	+ 12.3

¹ Commodities on which comparison is impracticable.

ENFORCEMENT OF THE LICENSE CONTROL.

The analyses that have gone before lay out the whole lot of food regulations, but do not tell systematically how those controls were enforced. The license system would have been a shell, and its requirements colorless, without practical and effective methods of enforcement. Mention has been made already of the teeth which were put into the act itself. Those penalty clauses, beyond doubt, struck fear in the minds of would-be violators and inspired respect for the rules set up under the act generally. But, curiously, the resort to criminal proceedings, the seizure of hoarded commodities or the requisitioning of supplies and plants was relatively infrequent. The great bulk of violations, in points both of number and importance, were treated by the quasi judicial administrative agencies created under the act.

The Enforcement Division.—The Enforcement Division of the Food Administration revoked altogether 8,676 licenses, in addition to other cases handled directly by the Federal State food administrators, from August 10, 1917, to December 30, 1918.¹ The common procedure with each of these administrative cases, after the facts of the alleged violation were found by a State food administrator and sent to the Enforcement Division at Washington, was to grant a hearing to the parties accused to determine whether there was a violation, and, if so, what fine should be imposed. After a decision was reached, an order was signed by the Food Administrator and forwarded to the State administrator for service upon the violator. Orders addressed to a licensee usually revoked or suspended the violator's license, or, when the violator chose, sometimes accepted in lieu of such revocation a contribution to the Red Cross or refund of excess profits. Orders addressed against a nonlicensee were, necessarily, issued in a roundabout method by ordering licensees not to sell goods to the nonlicensee violator. Stop orders were often given to hold up the issuance of a license. The Food Administration did not at any time hesitate to turn the open light of publicity upon these offenders. Notice was given through the press and trade papers of violations by particular persons. City grocers chose frequently to make literally extortionate "contributions" rather than have the "black-list" placard of the Food Administration hung in their shop windows. There were, in addition to this very important phase of the enforcement work, four others which were even more of an extra-

¹ A grouping of these revocations by kind shows that there were: Unlimited revocations, 249; limited revocations, 187; unlimited unfair orders, 58; limited unfair orders, 43; refunds and contributions, 4,123; temporary suspensions and minor penalties, 3,659; requisitions, etc., 65; stop orders, 210; cancellations, 10; criminal cases, 72; total, 8,676.

judicial character but which were none the less effective—the licensee reports to the Food Administration, the inspection work, the work of the Federal food administrators in the various States, and the emphasis upon publicity.

The licensee reports.—A phase of the enforcement provisions which many officials in the administration of food control believed of especial potency was the general requirement of reports from the licensees. The regulations made each licensee liable to give under oath complete information on any or all aspects of his business upon request of the Food Administration, and to hold his records and properties open for inspection.¹ These licensee reports, made upon blanks submitted by the Food Administration, became effective checks against violations. The report forms generally contained questions asking the amount on hand at the beginning of the month, the amount sold during the month, the amount on hand at the end of the month, and financial questions designed to show margins of profit. The system involved an infinite amount of tedious labor for the Food Administration and the licensee. There is need only to realize that the licensing system came to cover virtually all manufacturers and distributors of foods and feeds at wholesale to appreciate the flood of reports that poured into the D Street office at Washington. There were at the time of the signing of the armistice, moreover, 54 different kinds of periodical reports required by the Report Division alone. The Food Administration, after examining the applications for licenses, determined which report blanks each licensee should fill out, monthly or quarterly. A Checking-in Division kept strict record of all reports returned upon these blanks, and sent follow-up letters after the tardy reports. The reports, after being edited and having the violations encircled by a red-pencil mark, were referred to the various commodity chiefs or other proper responsible administrators. There were, at full tide, about 140,000 names upon the regular mailing lists, of which 105,000 were required to give monthly reports and 35,000 quarterly reports and which required the attention of nearly 500 clerks at the Food Administration. If a calculation based upon the returns made during May,

¹ Rule I of the General Regulations states: "It shall be the duty of each licensee to give to such representative as may be designated by the United States Food Administrator, whenever the said representative shall so require, any information concerning the conditions and management of the business of the licensee. Reports, when requested by said representative, shall be made on such blanks, to be furnished by the United States Food Administration, as the United States Food Administrator may designate, giving complete information regarding transactions in any commodities imported, manufactured, refined, packed, purchased, contracted for, received, sold, stored, shipped, or otherwise handled, distributed, or dealt with by the licensee, or on hand, in the possession or under the control of the licensee, and any other information concerning the business of the licensee that such representative may require from time to time. Whenever the said representative shall require it, the licensee shall furnish such information in writing under oath."

1918, is typical, the checked-in reports numbered about 85 per cent of the blanks mailed out.

It became apparent by the summer of 1918 that the report system, though in most senses effective as such, had been allowed to grow until it was both annoying to the licensees and top-heavy to the administrators. The volume of work involved in checking out blanks, checking in reports, returning reports for corrections and explaining misunderstandings by correspondence, editing and tabulating over 100,000 reports having as high as 70 questions each, literally snowed under the clerical staffs. The commodity chiefs, who were to make regulations from month to month by aid of those license reports, did not receive them with promptness. It was decided, rather than to double the clerical staff, to reduce the number of reports required. The number of periodical reports was cut by half before midsummer and to 28,000 in November. There were, then, at the signing of the armistice just 20 per cent as many reports made regularly as during the spring previous.

The inspection work.—With the gradual reduction in the licensee report system, a scheme of field inspection was instituted.¹ The impetus toward the proposed plan came largely from the success of such inspection as had been done, under the old report system, by inspectors in the service of the State organizations. Obviously the Food Administration could not hope to cover the country with paid inspectors. The prominent wholesale grocers, therefore, who distributed a large share of foodstuffs and who were already organized, were called to Washington and enlisted upon a volunteer basis to act as field advisers. They were thoroughly instructed in the purposes, policies, and requirements of the Food Administration. The inspection system was later reorganized on a State basis, and these field advisers were used as an educational staff available upon call of the Federal food administrators. The inspection service, though promising according to the view of the Enforcement Division, was not fully developed at the signing of the armistice.

The Federal food administration in the States.—The temptation is to study closely the policy-making office of the Food Administration at Washington, and thus fail to appreciate that the administration of the food policies was highly decentralized. The United States Food Administration, in the truer sense, took in a literal hierarchy of national, zone, State, district, county, and local units which were organized more or less formally and which were administering food policies.

The Food Administration at Washington, through its States Administration Division, disseminated its policies and rulings

¹ At a conference held Aug. 16, 1918, the Field Supervision Section was created with Mr. H. A. Sturges as chief, and with a small corps of inspectors.

directly through its ready contacts with a Federal food administrator in each State, the District of Columbia, Hawaii, Porto Rico, and Alaska. These Federal food administrators were held responsible for all food-control work within their respective States; they concerned themselves with the enforcement of the rules, propagated conservation policies, and administered distribution plans. Obviously, then, the States Administration Division, acting as a clearing house between the policy-making office at Washington and the Federal food administrators in the States, was obliged to keep the States informed on all actions taken at the central office. This task it did through "flying squadrons" going from State to State in person, zone meetings,¹ meetings for the State and local administrators, and literature through the mails. The Federal food administrators and their 3,200 district and county administrators, though serving gratis, conducted locally the national campaigns to enroll 12,000,000 housewives as members of the Food Administration, to use more potatoes, to advertise conservation work for world relief, and to use "no wheat." Each Federal food administrator had on his staff an educational director, a home-economics director, a State merchant representative, and a library director. The most important specific controls, perhaps, which were administered in a large way by the Federal food administrators were those pertaining to wheat and flour, bakers, meat, sugar, perishables, ice, eggs, price publication, and public eating places.

The emphasis upon publicity.—It ought again be mentioned, by way simply of emphasis, that the Food Administration gave wide publicity to all of its policies and depended upon the patriotism of the people to enforce them. No housewife, grocer, manufacturer, or miller was left in ignorance of the war measures upon which it wanted vigorous cooperation, and the social organizations of all forms and local papers were alert to denounce violations. The effectiveness of this phase of the control enforcement was no less potent because not a kind which permits of exact analysis.

THE CENTRALIZATION OF GOVERNMENT AND ALLIED FOOD PURCHASES.

The problem before the Food Administration was, in the last analysis, to anticipate and prevent a world food shortage during the war. The scope of its task and rising prices soon made necessary the setting up of affiliated boards to help control the food markets more rigidly. These extra efforts in food regulation were inevitable steps

¹ For administrative purposes the States were divided into 11 zones, numbered from 1 to 11, with meetings at the following points, respectively: Boston, Philadelphia, New York, Atlanta, Chicago, Vicksburg, Kansas City, Fargo, Denver, Boise, and San Francisco.

forced by the national and international aspects of the food situation and the desire to assure reasonable prices for Government and allied purchases.

The food requirements of the Government and its Allies had absorbed the lion's share of many staples, and, especially during the spring of 1917, opened the way to unrestrained foreign buying and rampant speculation. There had been no control of commodity prices in this country and extraordinary rises came thick and fast. The "all commodities" index number, which had remained near a prewar level throughout 1914 and 1915, shot from 123 to 189 during the year ending June, 1917, and the food group jumped from 111 to 167 during that same year.¹ The unregulated bidding, which contributed to the rise within the food group, was later controlled in part by the Food Administration Grain Corporation, the International Sugar Committee, and the Sugar Equalization Board which are mentioned elsewhere, and by the Division of Coordination of Purchase and the Food Purchase Board which are discussed here.

Division of coordination of purchase.—The Division of Coordination of Purchase, which came later to supervise Government and allied purchases of foodstuffs aggregating \$200,000,000 per month and over, was created as an advisory unit through which all war food purchases might clear.² An arrangement was made between the Government and the Allies that all allied food requirements (except grains, flour, and meal) should be submitted to a so-called allied provisions export commission, which in turn was to give notice of those requirements to the Food Administration.³ The Division of Coordination of Purchase, upon receipt of that notice, advised what method of purchase should be adopted in order least to disturb the market. These purchases were either allocated to the industry in a manner recommended by the Food Administration, given to the purchaser for approval after securing bids, or allowed to be made by the purchaser direct in the open market. The total value of purchases cleared

¹ See "Summary of History of Prices during the War," by Wesley C. Mitchell. (W. I. B. Price Bulletin No. 1.)

² Mr. Hoover, in his formal announcement of the creation of the Division of Coordination of Purchase on Oct. 24, 1917, stated that its purpose was "to coordinate the purchases of the Allies and the Food Administration of such important food supplies as those mentioned in the President's proclamation of Oct. 8, 1917, and to cooperate with the Army, Navy, and other Government departments in an endeavor to coordinate so far as practicable their purchases of such food supplies." The Food Section of the War Industries Board was transferred to the Food Administration a few days prior to the above announcement, on Oct. 15, 1917, and became part of the new Division of Coordination of Purchase.

³ See letters dated Nov. 21, 1917, and sent by Mr. Hoover to Allied provisions export commission, American Red Cross, Commission for Relief in Belgium, financial attaché of the Russian Embassy, the War Trade Board, and the Traffic executive, outlining for them the plan of the Division of Coordination of Purchase.

through the Division of Coordination of Purchase amounted to enormous figures.¹

Food Purchase Board.—Very shortly after the organization of the Division of Coordination of Purchase, there was created the Food Purchase Board with an especial design to bring a like coordination to all food purchases for the Army and Navy.² Its function generally was to settle what commodities were to be placed in the category of allocated purchases, to define general policies in method of purchase, to secure costs from the Federal Trade Commission, and to recommend prices to the Army and Navy.³ Representation was given on that board to the Secretary of War, the Secretary of the Navy, the Federal Trade Commission, and the United States Food Administration. These branches of the Government submitted to the Food Purchase Board their requirements for licensed staple commodities and that board determined whether the orders should be allocated to the trade. If a plan of allocation was advised by the Food Purchase Board, the Food Administration, with whom each purchaser filed a statement of the amounts needed, distributed the allotments on a pro rata basis throughout the country. The department for whom the allotment was made inspected the goods and, if the goods were satisfactory, completed the purchase.⁴ The Food Administration recommended prices to the Army and Navy upon the basis of cost investigations made by the Federal Trade Commission. Other agencies than the War and Navy availed themselves to an extent of the instruments of the Food Purchase Board.

The whole scheme for the centralization of Government and allied food purchases—whether in the Food Administration Grain Corporation, the International Sugar Committee, the Sugar Equalization Board, or the more comprehensive Division of Coordination of Purchase, and Food Purchase Board—held within its grasp, though it did not always exercise, one of the most effective of all war instruments for general food control.

¹ The Division of Coordination of Purchase during the 8 months ending December, 1918, cleared altogether food purchases amounting to \$1,069,370,419. Of that total, the Allies purchased \$715,000,000; the Army, Navy, and Marine Corps, \$203,000,000; and the Commission for Relief in Belgium, Red Cross, Salvation Army, and Y. M. C. A. the remainder. There follows a listing of those purchases by kind of commodities:

Canned goods-----	\$111,447,374	Miscellaneous---	\$36,534,980
Dairy products-----	30,113,288	Oils -----	54,279,440
Dried fruits and vegetables--	49,618,731	Sugar-----	29,951,860
Grains and grain products--	191,053,158		
Meat and hog products----	566,371,588	Total-----	1,069,370,419

² Created about Nov. 21, 1917, at the suggestion of the Food Administrator and given governmental authorization on May 8, 1918, by presidential proclamation.

³ These data appear in the minutes of the first meeting of the board held Dec. 11, 1917.

⁴ Second annual report of U. S. Food Administration.

3. THE FUEL ADMINISTRATION.

Our war experience with regulation did not bring forth a single instance of price fixing, if foods can be counted as controlled though not fixed, which touched so many people as the coal prices modified or fixed by the United States Fuel Administration. This control, like that over food prices and unlike most of the other price controls, was administered primarily for the protection of the public at large. The Fuel Administration, in so far, may be thought similar to the Food Administration, but unlike the price-fixing committee. Beyond this point, however, the methods of the Fuel Administration differ substantially from those even of the Food Administration.

The points of interest in a study of war-time control over fuel are: the problem that prompted fuel regulation; the early and informal control that was begun by the coal production committee under the Council of National Defense; the kind of control over coal that was made possible by the passage of the food and fuel act in 1917; the original prices fixed at the mine by the President for bituminous and then for anthracite coal; the modifications made from time to time in these prices by the Fuel Administrator; the steps that were taken to control prices asked by middlemen and those asked by retailers; and, finally, the coal costs that came later to be made the basis of all price fixing. It is of importance, too, to know how control was exercised over coke, and to what extent, if any, the Government put its hand upon the prices of petroleum.

(1) THE WAR-TIME RISE IN COAL PRICES.

The conditions of production which attach to soft or bituminous coal used by industry and comprising nearly 85 per cent of our total output of coal, and those which attach to hard or anthracite coal used by households make coal prices ordinarily an anomaly in price phenomenon. The abundance of supply and the large numbers of mines, given adequate transportation facilities, labor, and machinery, result usually in the meeting of all demands by the industry at competitive prices slightly above the cost of production.¹ Coal prices, then, under normal peace-time conditions, are not as variable in their

¹ See "Prices of Coal and Coke," by C. E. Leshner, W. I. B. Price Bulletin No. 85.

fluctuations as those of pig iron, wheat, or cotton.¹ The prices of bituminous coal, which relate to the general ebb and flow of industrial activities, are more sensitive to the market than those of anthracite coal, which relate more especially to fireside demands. The price of bituminous coal, which was quoted at \$0.0752 per bushel at Pittsburgh in 1900, did not until 1916 vary more than 19 per cent in any month above that level, while anthracite coal (stove) which was quoted at \$4.3224 per ton in 1901, did not vary more than 15 per cent.² Coal prices ordinarily are stable prices, and large deviations are serious in their effects on industry or the household.

There was reason for concern, then, as nearly every industrial plant and householder felt when coal prices suddenly started upward in the latter part of 1916 and kept rising. They had throughout 1914 and 1915 clung safely near their prewar level when, indeed, they had not gone below it. But a weighted average of bituminous coal prices, made from prices taken in all districts of the United States, shows that the quoted general price of that coal leaped in July, 1916, from its prewar level of \$1.30 per net ton to \$3.46 by December following.³ Likewise a weighted average of anthracite coal prices, made from our total egg, stove, chestnut, pea, and steam production, rose from \$2.92 in May, 1916, to \$4.11 by May, 1917. These extraordinary rises in prices are without precedent in coal history since 1890, if ever.

The imminent and widespread concern of manufacturers and householders, as they faced high prices in the prosperous year 1917, was not alone that coal had soared to heights unknown, but that coal at any price was uncomfortably scarce. The war-time production orders, together with the excessively cold winter, were making heavier demands upon the coal stocks than ever before and threatened a serious coal shortage. Curiously, when it was most necessary to carry coal from the mines to central distributing points, the railroad system became so heavily loaded that congestion set in and thousands of tons of coal were left standing at the mines for lack of empty cars and transportation facilities. This unusual situation upset the coal market completely for the first time in years and disturbed beyond immediate recovery the nice balance between the production, the cost, and the market price for coal.

There is listed below a series of data by which may be compared month by month from January, 1913, to December, 1918, the total

¹ The stability of coal prices is due in part to the fact that the wages of labor, which do not fluctuate greatly, constitute nearly 80 per cent of the cost of coal production.

² Wholesale Prices 1890 to 1916, by Bureau of Labor Statistics, Bulletin No. 226.

³ In Ohio and Pennsylvania the increase was the greatest, the highest spot price recorded being more than 400 per cent above the prewar level, with the smokeless coals of West Virginia and the high-grade coal from the Georges Creek district of Maryland next approaching in extent of rise in price.

production of bituminous coal in this country,¹ and the weighted market prices at which it sold.² A ready comparison of the variation in production and prices has been facilitated by the reduction of each actual figure to a relative figure, using the respective prewar figures (average from July 1, 1913, to June 30, 1914) as a base equal to 100 in each case. The figures have been extended beyond the time when control set in for reference later when an inquiry will be made into the effectiveness of that control.

PRODUCTION OF BITUMINOUS COAL IN THE UNITED STATES.

ACTUAL PRODUCTION (SHORT TONS).

Month.	1913	1914	1915	1916	1917	1918
January.....	42,276,272	40,187,739	37,190,800	46,596,094	47,967,354	42,607,000
February.....	37,066,985	35,472,535	29,321,443	45,186,515	41,352,711	44,385,000
March.....	37,535,421	45,454,707	31,800,830	43,821,604	47,928,652	48,631,000
April.....	34,168,990	23,609,695	29,968,240	33,628,164	41,854,320	46,501,000
May.....	37,204,880	28,551,219	30,938,434	38,603,759	47,086,452	50,927,000
June.....	37,404,953	31,411,952	33,956,818	37,741,972	46,824,646	51,758,000
July.....	38,857,653	34,305,418	35,573,809	38,113,105	46,291,572	55,587,000
August.....	41,589,085	37,751,578	38,160,995	42,695,735	47,372,226	55,732,000
September.....	41,423,796	39,018,756	40,963,780	42,098,831	45,107,956	51,757,000
October.....	46,164,649	37,685,182	44,197,763	44,807,205	48,337,726	52,886,000
November.....	43,233,145	33,392,681	44,736,760	44,927,817	47,689,801	44,387,000
December.....	41,519,477	35,962,508	45,814,754	44,097,744	44,037,147	49,635,000
Year.....	478,435,297	422,703,970	442,624,426	502,518,545	551,790,563	585,883,000

WEIGHTED AVERAGE "SPOT" PRICES OF ALL BITUMINOUS COAL IN THE UNITED STATES.

ACTUAL PRICES PER NET TON.

Month.	1913	1914	1915	1916	1917	1918
January.....	\$1.47	\$1.27	\$1.20	\$1.54	\$3.73	\$2.60
February.....	1.29	1.24	1.19	1.44	3.75	2.64
March.....	1.25	1.24	1.17	1.33	3.53	2.67
April.....	1.24	1.24	1.16	1.32	3.00	2.71
May.....	1.23	1.24	1.16	1.29	3.72	2.75
June.....	1.23	1.21	1.15	1.33	3.77	2.66
July.....	1.25	1.20	1.14	1.30	2.98	2.66
August.....	1.28	1.21	1.15	1.35	3.03	2.67
September.....	1.29	1.29	1.18	1.56	2.12	2.67
October.....	1.33	1.21	1.20	2.11	2.15	2.67
November.....	1.35	1.19	1.23	3.36	2.58	2.67
December.....	1.28	1.20	1.36	3.46	2.59	2.67
Year.....	1.29	1.22	1.19	1.78	3.08	2.67

¹The production figures represent those adopted officially by the United States Geological Survey and the United States Fuel Administration for the years given.

²The weighted average market prices for bituminous coal, representing a grand average of prices from all districts of the United States, were compiled especially by C. E. Lasher, of the Fuel Administration, from the Coal Age. The mean of the high and low weekly quotations, where necessary, were reduced to a net ton basis and to f. o. b. mines by deducting the freight rate in effect at the particular time, and reduced then to monthly prices by taking simple averages. A single quotation was then obtained for each coal for each month by averaging the quotation for prepared sizes, run-of-mine, and slack or screenings in accordance with the proportion of each size produced in each field in 1917. The final grand weighted average, therefore, representing an examination of 35,000 quotations, shows the "spot" prices for 15 bituminous coals. It should be borne in mind that the contract prices, at which a bulk of coal sold, did not rise as high as the "spot" prices quoted above nor did the smaller production of anthracite coal undergo such phenomenal rises as the bituminous coal quoted above.

PRODUCTION OF BITUMINOUS COAL IN THE UNITED STATES.

RELATIVE PRODUCTION.

Month.	1913	1914	1915	1916	1917	1918
January.....	111	105	98	122	126	112
February.....	97	93	77	118	108	116
March.....	98	119	83	115	126	128
April.....	90	62	79	88	110	122
May.....	98	75	81	102	124	134
June.....	98	82	89	99	123	136
July.....	102	90	93	100	121	146
August.....	109	99	100	112	124	146
September.....	109	102	107	110	118	136
October.....	121	99	116	118	127	139
November.....	113	88	117	118	125	116
December.....	109	94	120	116	116	107
Year.....	105	92	97	110	121	123

WEIGHTED AVERAGE "SPOT" PRICES OF ALL BITUMINOUS COAL IN THE UNITED STATES.

RELATIVE PRICES.

Month.	1913	1914	1915	1916	1917	1918
January.....	116	100	94	121	294	205
February.....	102	98	94	113	295	208
March.....	98	98	92	105	278	210
April.....	98	98	91	104	236	213
May.....	97	98	91	102	293	217
June.....	97	95	91	105	297	209
July.....	98	94	90	102	235	209
August.....	101	95	91	106	239	210
September.....	102	94	93	123	167	210
October.....	105	95	94	166	169	210
November.....	106	94	97	265	203	210
December.....	101	94	107	272	204	210
Year.....	102	96	94	140	243	210

The market prices of coal in this country, far from maintaining their usual relation to production, took a spurt which landed them at unprecedented heights, and alarmed the Government at Washington early in 1917. It was apparent that the Government sooner or later must assume some sort of control over coal prices with a view quite as much to stimulating production as of protecting consumers against a further rise.

(2) THE COAL PRODUCTION COMMITTEE.

The intermediate step leading to the final Government control over coal, as was wont during war time, was taken by the Council of National Defense through the voluntary organization of a trade committee. The council, impressed with the necessity for some form of action to stimulate production, appointed a committee on coal production on April 27, 1917.¹ This committee believed at the outset that the increased domestic needs and those of the Allies would

¹ Mr. Francis S. Peabody, a large dealer in coal, was made chairman of this committee, composed of various men of the coal industry in cooperation with mine workers, coke producers, distributors, consumers, transportation agencies, the Geological Survey, the Bureau of Mines, and the Department of Labor.

push the 1917 requirements far in excess even of the bumper production of 1916.¹ With the assistance, accordingly, of the Bureau of Mines and the Geological Survey, a survey of the coal situation was made which revealed that the limiting factors in meeting the coal requirements were the shortage of mine workers and the inadequacy of distributing facilities.² The potential capacity was, of course, in excess of the maximum requirements. The early war-time control of fuel later taken over by the Fuel Administration can not be understood without taking serious account of the 1,700,000-ton Navy order placed by the early coal production committee, the agreement made with the industry upon the Peabody-Lane prices, and their immediate repudiation by the Secretary of War.

THE 1,700,000-TON NAVY ORDER.

The Navy Department, unable to secure bids for supplying the coal needed by its battleships, called upon the committee on coal production to negotiate a satisfactory purchase. The committee, early in June, 1917, called the coal producers to Washington for conference. The producers, already well loaded with orders, promised to deliver the full 1,700,000 tons required at a suggested price of \$2.95 per ton. Secretary of Navy Daniels, regarding that price as excessive, gave orders June 19, or thereabouts, under the authority of the naval act, that coal producers prepare to furnish the required tonnage at an allowance of \$2.335 per gross ton f. o. b. mines. The final price, he announced, would be determined later when the Federal Trade Commission had completed its inquiry into costs, and might be adjusted to a point below or in excess of that price.³ The firmness which characterized this mandatory order, and its insistence upon an initial price far below the market or even that asked by the producers, made the coal dealers realize that regulation of some form was within sight.

THE PEABODY-LANE PRICES.

The coal-production committee, fully aware of the necessity for fostering the increased production that had already set in, called about 400 of the coal producers again to Washington during the last week of June to discuss methods of reducing the prices of coal to the Government and to the public. These producers, at a three-day conference held in the new Interior Building, met with the commit-

¹The production of 502,518,545 tons of bituminous coal in 1916, though exceeded both in 1917 and 1918, was a high record for the industry at the time the Government faced the necessity for increased production early in 1917.

²Report of F. S. Peabody made to the Council of National Defense, and printed in its first annual report, p. 83.

³See the Peabody report referred to above, and an announcement made by the Navy Department printed in the Official Bulletin for June 19, 1917.

tee and conferred with Secretary of the Interior Lane, Secretary of the Navy Daniels, John T. Fort, of the Federal Trade Commission, which was investigating coal costs, and other officials. The outcome of this conference, at which price fixing was freely discussed and tentative maximum prices for coal agreed upon, is peculiarly significant in the light of later coal control.

Secretary Lane, strongly backing the action of the coal-production committee, was especially instrumental in finally drawing to a head on June 28 a voluntary agreement by the bituminous producers to set a maximum price of \$3.50 per ton for domestic lump, egg, and nut coal, and a maximum of \$3 per ton for run-of-mine coal to be effective on July 1.¹ These agreed prices, prior to any actual price fixing by the Government, were distinctly lower than the quoted prices for various districts. Indeed, the weighted average price of all bituminous coal for June was as high as \$3.77 per ton. Not only did the coal-production committee agree with the operators at that early time upon tentative maximum prices for coal but likewise upon jobber, broker, and retailer commissions. These latter dealers, it was determined, would be allowed to charge no more than one commission, and that not in excess of 25 cents per ton. It is noteworthy that the producers, although informally agreeing upon the above tentative prices, appointed committees and formally authorized them and the Government to fix further prices.²

¹ Secretary Franklin K. Lane in a letter to F. S. Peabody dated June 28, 1917, said: "I feel that the present extremely high prices on coal require immediate action by the coal operators, and, therefore, would urge upon you that they should be reduced at once and maximum prices fixed which would apply to sales on and after July 1, 1917, and continue until such time as the investigation which you propose into costs and conditions shall warrant a reduction or increase. These prices should not be used to affect present contracts or apply to export or foreign trade. In other words, the people of the United States should have, as I urged upon the operators the other day, immediate relief and knowledge of their disposition to make a reasonable price irrespective of the possibilities of obtaining higher prices. This would be regarded by the people as meeting the situation promptly and wisely if the prices materially cut those which exist."

² A report of the proceedings of this meeting, as printed in the *Commercial and Financial Chronicle* for June 30, 1917, shows that the producers resolved that "these committees report forthwith to the Secretary of the Interior, the Federal Trade Commission, and the committee on coal production of the Council of National Defense, costs and conditions surrounding the production and distribution of coal in each district and that these committees are authorized, in their discretion, to give assent to such maximum prices for coal f. o. b. cars at mines in the various districts as may be named by the Secretary of the Interior, the Federal Trade Commission, and the committee on coal production of the Council of National Defense."

"This convention by resolution heretofore adopted having requested the Secretary of the Interior, the Federal Trade Commission, and the committee on coal production to fix a fair and reasonable price at which the several operators in the several coal districts of the United States shall sell coal, do hereby further authorize said Government representatives, so named in said resolution, to forthwith issue a statement fixing a tentative maximum price, which, in their judgment, is fair and reasonable as applied to the several coal districts, at which coal shall be sold from and after the 1st day of July next and until the accurate costs have been ascertained and a fair and reasonable price based thereon fixed by said Government agencies designated under said resolution."

A full account of this historic coal meeting with the bituminous producers and the Peabody-Lane prices that were established, as authorized by the Department of the Interior follows:¹

As a result of the conference between the mine operators, the Secretary of the Interior, Federal Trade Commissioner Fort, Chairman Peabody, and the committee on coal production of the Council of National Defense, the following reductions were made to go into effect July 1 next in the prices of coal. This, according to the statement of Director George Otis Smith, of the Geological Survey of the Interior Department, will effect a reduction to the consumers east of the Mississippi River of \$15,000,000 a month, based on the output of free coal in May of this year. These prices are maximum prices per ton of 2,000 pounds aboard the cars at mine pending further investigation. These prices do not affect in any way contracts in existence or sales of coal for foreign or export trade.

The operators tendered to the Government a reduction from these reduced prices of 50 cents per ton for coal that the Government may need.

No action was taken upon anthracite prices, because of the fact that these prices had already been acted upon by the Federal Trade Commission.

Twenty-five cents per net ton was fixed as the maximum price for coal jobbers' commission, with only one commission, no matter how many jobbers' hands the coal may pass through.

On account of an inadequate representation of operators west of the Mississippi River, no maximum prices were fixed for coal from those districts. A supplementary statement will be issued within a few days covering prices on coal produced in those districts.

The action taken at this conference brings about the following results: Present prices on bituminous coal mined in Pennsylvania have ranged from \$4.75 to \$6. Under the ruling the price is reduced to \$3 for mine run and \$3.50 for domestic lump, egg, and nut.

The present range of prices in West Virginia is from \$4.50 to \$6; price reduced to \$3 for mine run and \$3.50 for domestic lump, egg, and nut.

The range of prices for Ohio coal has been from \$4.50 to \$5; prices reduced to: No. 8 district, the thick vein Hocking and Cambridge districts, \$3 for mine run and \$3.50 for domestic lump, egg, and nut; thin vein Hocking, Pomeroy, Cooksville, Coshocton, Columbiana County, Tuscarawas County, Amsterdam-Bergholz district, \$3.25 for mine run and \$3.50 for domestic lump, egg, and nut; the Massillon and Palmyra districts, and Jackson County, \$3.50 for all grades of coal.

The prevailing prices in Alabama have been from \$5.50 to \$5.75; prices reduced to: Cahaba and Black Creek, \$4; Prat, Jaeger, and Corona, \$3.50; Big Seam, \$3 for all grades.

The prevailing prices for coal mined in Maryland have been from \$5.75 to \$5; reduced prices will be \$3 for mine run and \$3.50 for domestic lump, egg, and nut.

The prevailing prices on coal mined in Virginia have been \$4.50 to \$5; reduced price, \$3 for mine run and \$3.50 for lump, egg, and nut.

The prevailing prices on coal mined in Kentucky have been from \$4 to \$4.50; reduced price, \$3 for mine run and \$3.50 for the domestic sizes.

The prevailing prices on coal mined in Illinois and Indiana have been from \$3.50 to \$4; reduced price, \$2.75 for mine run and steam sizes and \$3.50 for

¹ Issued June 28, 1917, by the Secretary of the Department of Interior and printed in full in the coal hearings before the subcommittee of the Senate Committee on Manufactures, pursuant to Senate resolution 163, Sixty-fifth Congress, second session.

screened domestic sizes, 50 cents per ton above these prices in the long-wall field of northern Illinois, Assumption, and Murphreesboro.

The prevailing prices on coal mined in Tennessee have been from \$4.50 to \$5; reduced price, \$3.50 for all sizes.

Secretary Lane, with the coal production committee, highly pleased at the outcome, sent the coal operators home happy by a closing address, declaring "this is a very novel proceeding. I think I am within the fact when I say that no such hearing or gathering as this has ever been held in the United States before, or perhaps in the world."¹

THEIR REPUDIATION BY SECRETARY BAKER.

Scarcely had the Peabody-Lane prices been agreed upon and the operators had reached their homes then the agreement was flatly denounced and repudiated by Secretary of War Baker. The Secretary of War, who was president of the Council of National Defense and therefore in authority over the Peabody coal production committee, wrote to the director of the council on June 30, characterizing the whole proceeding of the coal meeting as misleading and disclaiming any authority for price fixing.² This show of seeming

¹ Senate hearings referred to above.

² The letter written to W. S. Gifford, Director of the Council of National Defense, by Newton D. Baker, its president, on June 30, 1917, follows in full:

"My attention has been called through the newspapers to the action reported to have been taken at Washington, D. C., during the past week by the so-called committee on coal production of the Council of National Defense, in cooperation with certain coal producers and representatives of coal-mining enterprises, with regard to the price of bituminous and anthracite coal.

"The facts seem to be that the coal production committee invited to Washington various coal operators and arranged conferences between them, members of the coal production committee, and members of the Federal Trade Commission, leading to the adoption of resolutions in favor of an early and accurate determination of the costs involved in the production of bituminous and anthracite coal, as a basis for some future action by some official agency of the Government in fixing fair and just prices for these products, should any such agency be given power to do so. Pending such an ascertainment of costs this meeting seems to have adopted a resolution whereby the operators present agreed to sell bituminous coal at a price not higher than \$3 per ton, and that this obligation should remain in force until some such action had been taken by an authorized governmental agency.

"The color which has been given to this meeting and this resolution in the newspapers may well mislead the public into believing that the Council of National Defense has either undertaken itself to fix the price of coal, or to sanction its being fixed by the coal production committee, or that committee in conjunction with the coal operators. I, therefore, as president of the Council of National Defense, write to say that the Council of National Defense has no legal power, and claims no legal power, either to fix the price of coal, or to fix a maximum price for coal or any other product. The coal production committee is a subordinate committee of the Council of National Defense, purely advisory in its character, formed for the purpose of advising the council as to steps which might be recommended leading to a stimulation of production and distribution of coal. No power has been even attempted to be delegated to it to consider or deal with the question of price, and any action taken by that committee, or sanctioned by that committee, dealing with price, either fixed or maximum for coal, is clearly beyond the legal power of the coal production committee and of the Council of National Defense from which the committee derives whatever authority it has.

"As you are aware, the Federal Trade Commission has been directed by the President to ascertain for his information the costs involved in coal production. I am to some

dissension within the Government threw chaos into the ranks of the producers and uncertainty whether the agreement was or was not longer binding upon them or upon the Government.¹ The whole affair, believed by Secretary Baker to be a dangerous precedent and destined to forestall a firmer control by the Government, produced a situation of utter confusion.²

It appears that the failure of officials to agree among themselves upon an immediate relief to the coal situation, and the threatening shortage, provoked rather serious discussion in several States during the summer. Ohio, Indiana, Illinois, Wisconsin, and others, through their State councils of national defense, began to plan independent action. Scores of individual letters from various sections showed clearly that the rising prices and the coal shortage were touching the people to the quick.³ The Illinois Council of National

extent familiar with the progress made by the commission. The information I have from that and other sources, I think, justified me in believing that the price of \$3 suggested, or agreed on, as a maximum, is an exorbitant, unjust, and oppressive price.

"The fact that these conferences were attended by members of the Federal Trade Commission and by members of the Council of National Defense, of course adds nothing to their legal powers, and I am sure that none of my associates in the council will dissent from the view that I have herein expressed, both on the limitation upon the powers of the council and the coal production committee, and the effect of the action alleged to have been taken.

"I write this for the information of the coal production committee, and for the guidance of all other subcommittees of the council."

¹ An especially lucid definition of the general price functions of the Council of National Defense as he saw them and as provoked by the coal meeting was made by Newton D. Baker in a letter to Director W. S. Gifford on July 13, 1917.

² Francis S. Peabody, after the repudiation of the coal prices by Secretary Baker, wrote Director Gifford the following letter, in part, on July 13, 1917:

"The letter of the Secretary of War of June 30, criticizing the tentative maximum prices established for bituminous coal, and the action of the committee on coal production, has created a serious condition in the industry. Unless some definite announcement is made at once, by the Council of National Defense, which will remove existing uncertainties and promptly reestablish the active production and distribution of coal, hardship and suffering will result this winter.

"The Secretary's letter carrying such weight, as it naturally would, with the public, and characterizing the tentative prices as it does, has produced in the minds of a great number of consumers the expectation that by deferring their purchases they would obtain their supplies at figures below those heretofore named. The natural and inevitable result of these uncertainties is that the buying of bituminous coal for storage purposes has practically ceased, and normal current stocking is gravely threatened. * * *

"The sentiment of the operators, as expressed in the convention, had a marked effect on prices, even before any definite action had been taken, and before the convention adjourned prevailing abnormally high prices had substantially disappeared. With deference to the opinion of Secretary Baker, as expressed in his letter, I still adhere to the opinion that the action of this convention which resulted in the establishment of tentative maximum prices, pending the conclusion of the investigation of costs of production being made by the Federal Trade Commission, was not only wisely taken but was absolutely necessary to stimulate production, stabilize market conditions, and secure equitable distribution of coal to the people at fair and reasonable prices."

³ The following letter from Col. A. M. Shook, dated June 16, 1917, and showing the disquiet in Tennessee over the coal situation, was typical of others:

"In this particular section the question of fuel is to-day the most vital one. The abnormal demand for coal is such that mine operators are enabled to sell their output at prices varying from 100 to 300 per cent above prevailing prices of one year ago. I see no way to remedy these conditions except by Federal legislation. As long as the consumer will agree to pay from \$3 to \$5 per ton for coal that was selling a year ago

Defense, indeed, went so far as to discuss seizure of the mines by the State, independent of the National Government.¹ The pressure of the State councils of national defense from the northern Middle States—Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin—which was exerted upon the national council at a meeting in Chicago was a considerable factor in urging the Government to action.

(3) THE FOOD AND FUEL ACT.

The alarm at the rising prices for coal, and the distressing status of its distribution prompted Senator Pomerene to urge, against attack from several sides in the Congress, a rider to the pending Lever bill, permitting the President to fix coal prices. The President, too, took a firm personal interest in the coal problem, and finally, on August 10, 1917, the food control act was passed with the Pomerene amendment and is now often called the food and control act.² The Fuel Administration was created by the President under the authority given him by this act. To no other price-fixing agency at Washington were there given such definite legal powers to fix prices or such sharp instruments for their enforcement.

THE POWER TO FIX COAL AND COKE PRICES.

The food and fuel act, without any ado, gave authority to the President, whenever in his judgment it was necessary for the efficient prosecution of the war, "to fix the price of coal and coke, wherever and whenever sold, either by producer or dealer, to establish rules for the regulation of and to regulate the method of production, sale, shipment, distribution, apportionment, or storage thereof among dealers and consumers, domestic or foreign."

at \$1.50 per ton, the operator will not refuse to accept it. As a rule, here, the operator is the only beneficiary from these abnormal prices. Labor has not been materially advanced. Freight rates are practically the same as they were a year ago. The consumer pays the price and the operator reaps the benefit. These conditions will continue unless legislative authority is placed somewhere to control these abnormal conditions."

¹ The committee on law and legislation of the State Council of Defense of Illinois, highly agitated by their failure to find relief otherwise, on Aug. 7, 1917, recommended steps no less drastic than the following:

1. Seizure by the State, and operation by it during the period of the war, of the coal mines in this State.

2. Call an immediate meeting of representatives of the State councils of the neighboring coal-producing States so that an adequate and uniform measure of relief can be at once contemporaneously adopted and enforced in all these States.

3. Either separately or in conjunction with the State councils of the neighboring coal-producing States, take immediate steps to bring about the adoption of a Federal law which will give full and sweeping Federal powers of control over prices and distribution to an administrative body possessing the machinery to render complete and instant relief.

² The so-called Pomerene amendment was written into the food control act as sec. 25. (Public Documents, No. 41, 65th Cong.)

ENFORCEMENT PROVISIONS.

A no less unusual feature of the food and fuel control act than the breadth of its delegated powers was the stringency of its enforcement provisions. The fuel section of the act not only allowed a fine of \$5,000 or two years of imprisonment as a punishment to violators, but gave the President power to requisition and take over plants virtually at his own will. The law declared, in part, "that if, in the opinion of the President, any such producer or dealer fails or neglects to conform to such prices or regulations, or to conduct his business efficiently under the regulations and control of the President as aforesaid, or conducts it in a manner prejudicial to the public interest, then the President is hereby authorized and empowered in every such case to requisition and take over the plant, business, and all appurtenances thereof belonging to such producer or dealer as a going concern, and to operate or cause the same to be operated in such manner and through such agency as he may direct during the period of the war or for such part of said time as in his judgment may be necessary."

(4) THE KINDS OF FUEL CONTROL.

Apparently the persuasions of the chairman of the Federal Trade Commission had influenced Senator Pomerene to urge his coal amendment to the so-called Lever bill in the hope that coal control, when begun by the Government, would be delegated to the Federal Trade Commission. The clauses of the act itself make frequent authorizations for coal control, referring over and again to the Federal Trade Commission and making no mention of any other body in particular.¹

But the President, who had started the Federal Trade Commission long since upon an inquiry into coal costs and allowed it to remain in semiofficial control for a fortnight after the passage of the act, finally set up an independent body to control coal. The Fuel Administration, obliged to shape its general plans of administration somewhat after those written into the law for the Federal Trade Commission, soon organized and began a control over distribution, production, conservation, and prices.

¹George H. Cushing, in an article on "Ending the coal dilemma," in the *Atlantic Monthly* for November, 1918, says in part: "The Federal Trade Commission had a well-defined ambition to control the coal industry. Indeed, William B. Colver, now its chairman, and several of its employees had, while the Lane-Peabody conference was still sitting, appeared before a Senate committee to outline their plan of control. At about that time Mr. Colver had persuaded Senator Pomerene, of Ohio, to present his plan to Congress as an amendment to the Lever bill then under consideration. It is now a part of that statute."

ORGANIZATION.

The President, who had named a Food Administrator immediately after signing the food and fuel act, did not announce his appointment of Harry A. Garfield as Fuel Administrator until August 23, 1917. The new administrator, during the late summer and early fall, began the appointment of State and local fuel administrators and committees. The Fuel Administration finally was organized somewhat like the Food Administration, with an hierarchy of administrators and committees penetrating even the smallest of the cities in the country and all heading up to the office at Washington. That similarity of method was not to be wondered at, since fuel problems, like food, have peculiarly local aspects.

CONTROL OVER DISTRIBUTION.

The Fuel Administration, impressed over and again by the demands for empty cars, saw shortly that one of its most formidable problems would be to effect a proper distribution of coal. The Senate inquiry, through the testimony of John F. Fort, of the Federal Trade Commission, had found that¹ "transportation was the greatest problem during the whole of 1917, as was pointed out in both the May and June, 1917, reports of our commission. The facts disclosed at the hearings and in our investigations made it clear that the percentage of cars delivered at the mouth of the mine by the railroads was in almost all cases far below the number of cars which the increased production by the operators could have used if furnished."

By all odds, the most important step taken for a better distribution of bituminous coal orders, and that looking to a relief in the transportation congestion problem, was the establishment of a zone system on March 22, 1918.² That system, carefully worked out and finally put into effect by the joint efforts of the Fuel and Railroad Administrations, had in mind the saving of car-miles and offered a sure and flexible means of controlling distribution.

Coal theretofore had been distributed practically without regard to the distance between the mine and consumer. The consumers, the Government, and the distributors each to a degree had, amid the tremendous shortage prevailing, been guilty of carrying coal to Newcastle. It had been the ordinary thing for producers or purchasers to pass by nearer stores and ship coal halfway across the continent to satisfy their choices in selection. A plan was accord-

¹ Coal hearings of Senate committee pursuant to Senate resolution 163, held December, 1917, and January, 1918.

² This whole plan is outlined in full by the Fuel Administration in its Publication No. 21 and in its "General Orders, Regulations, and Rulings," p. 213-354.

ingly established¹ by which producers were not allowed, without a special permit, to sell coal beyond designated consuming zones. The main object of the zone system was to restrict eastern coal to eastern markets and fill vacancies in the Central and Western States with near-by coal produced in those States. The zone system affected all bituminous coal except that for railroad fuel, coal for movement on inland waterways, and coal delivered to Canada. The zones, which were not made applicable either to anthracite coal or coke, were made effective for bituminous and cannel coals on April 1, 1918. It would seem that the methods for enforcing the zone plan were efficacious, since the Fuel Administration prohibited the distribution beyond the limits of the zones, and the Railroad Administration helped to enforce them by railroad embargoes.

The movements of bituminous coal, regulated by the zone system, was about 300,000,000 tons, or 60 per cent of the total production. It was estimated by the Fuel Administration that there would thus be realized a saving, on the round trip from and to the mines, of almost 160,000,000 car-miles. That saving was enough to permit the same cars to make nearly 300,000 additional trips from the mines, equivalent to an increase of 5 per cent in the production.²

CONTROL OVER PRODUCTION.

The tremendous exigencies of war, since this country had never in peace times feared so gigantic a shortage of coal, made the in-

¹ These zones were geographical units in which the Fuel Administration, with the assistance of the Railroad Administration, regulated the distribution and apportionment of bituminous coal. They were designated by letters and covered the following territories: Zone A—Missouri, Arkansas, Kansas, Oklahoma, and Iowa; zone B—Minnesota, the Upper Peninsula of Michigan, and Wisconsin on the western bank of Lake Michigan, and on Lake Superior; zone C—Illinois; zone D—Indiana; zone E—western Kentucky; zone F—Virginia, eastern Kentucky, and Tennessee; zone G—certain parts of Tennessee, Georgia, and Kentucky; zone H—Alabama; zone K—Ohio; zone L—certain parts of West Virginia; zone M—certain other portions of West Virginia; zone N—certain other portions of West Virginia and Virginia; zone P—northern West Virginia, Pennsylvania, and Maryland.

² The primary savings, contemplated by the Fuel Administration in the announcement of its zone system on Mar. 22, 1918, are briefly summarized. It was believed that, in addition to the saving in transportation, there could be effected a retention of about 5,000,000 much-needed tons for the Eastern States, which, theretofore, had gone west all rail. The plan, it was thought, would eliminate the movement of more than 2,000,000 tons of Pocahontas coal to Chicago and other western points over a haul of 660 miles. Chicago, then, under the plan, would be compelled to obtain that amount instead largely from southern Illinois mines, an average haul of 312 miles. This change alone meant, allowing for the differences in quality in the two coals, a saving of 11,400,000 car-miles, or 285,000 car-days. Such a saving, if utilized in West Virginia mines, would permit 14 additional round trips of 20 days each and an additional production of at least 700,000 tons of Pocahontas coal.

In like manner it was figured that in the movement of 550,000 tons annually from Kanawha districts to Wisconsin points there could be saved 2,500,000 car-miles, with a consequent increased production of about 300,000 tons. A saving of 800,000 car-miles in the movement from southeastern Kentucky to Chicago was calculated to increase production 50,000 tons. Still another elimination of the Indiana to Iowa movement was figured to save 1,000,000 car-miles and permit 100,000 tons additional production.

crease of production generally the primary concern in the coal problem. It is estimated, in a general way, that an army uses 10 tons of steel per man each year. But since it requires, on an average, 5 tons of coal to produce 1 ton of steel, 50 tons of coal are needed for each soldier.¹ The situation was the more threatening since England, which ordinarily produces coal in abundance, had difficulty with her coal-production program and had come seriously to rely upon American coal. This statement is true, not in the sense that England took to shipping that needed supply from American ports to her own in the form of coal, but in the sense that she came in large ways to rely upon our steel, which could be shipped with a lesser tonnage.

The prices fixed tentatively by the early coal-production committee were not accepted, but the Peabody-Lane agreement succeeded in impressing industry with the paramount necessity for increasing production. Mr. John F. Fort, of the Federal Trade Commission, indeed, who took a hand in the Peabody-Lane agreement with the operators at the three-day conference beginning June 26, 1917, said frankly:²

When we were considering this question of fixing the price, the question of production was the thing that entered into the problem most seriously. The coal output was recognized as at that time not to be sufficient to meet the current demands. The business interests of the country were perfectly willing to pay the price fixed at that time, and were paying a very much larger price, and to them the question of getting coal was more important than the price.

The Fuel Administration, facing an exceedingly intricate problem, recognized in the coal shortage one of its most difficult problems. There has, for all of that, been made a charge that it gave too much emphasis to the price phases of the problem and too slowly turned to the production phases, and that this error resulted later in a serious coal shortage in the country.³ It can not be judged whether that was true or not. It would not, if true, have been strange, since the country always has had too much coal quickly to appreciate the seriousness of a shortage. Nor did the country realize how dependent the world had become upon the American supply in 1917.

There is especial interest, in the face of these facts and with a knowledge of the steps taken to alleviate the coal situation, to note the course of production during 1917 and later. A preceding table in this chapter shows that the total bituminous-coal production in the month of May, 1917, was, in round numbers, 41,000,000 tons. It jumped the following month to 47,000,000 and remained relatively near that figure each month for the remainder of the year, except for

¹ An estimate made by George H. Cushing.

² Senate hearings referred to above, p. 854.

³ This notion has been especially urged by George H. Cushing, in the *Atlantic Monthly* for November, 1917, pp. 589-598.

September, when it fell to 45,000,000, and for December, when it fell to 44,000,000. The 1918 production remained near or above 50,000,000 tons per month from March until November. There then began a slump in production which had not yet disappeared by the early summer of 1919. The December, 1918, production, although the preceding months it had been around 50,000,000, fell to 40,000,000 tons. In February, 1919, it fell to 31,000,000 and did not rise over 2,000,000 tons above that amount either in April or May. Altogether 1916, 1917, and 1918 were, each in their turn, all record years for the industry. The control over coal production did, beyond any question, stimulate production. The total production of bituminous coal in this country in 1916, before Government regulation set in, was 502,000,000 tons. When Government control began, that amount was increased to 551,000,000 tons in 1917 and to 585,000,000 tons in 1918.

CONTROL OVER CONSERVATION.

It is of passing interest in a price inquiry that the Fuel Administration, though on a much less extensive scale than the Food Administration, did institute a coal conservation program. That program in the main, went little further than a cutting down of fuel for certain nonwar industries, the advocacy of lightless nights, the skip-stop systems, no-coal days, and the recommendations against uses of coal for private yachts and for country clubs.

(5) THE CONTROL OVER COAL PRICES.

The administration, after securing power from Congress to act, found itself squarely under the necessity of bringing some kind of relief to the coal situation. The distribution and price phases, whether or not more fundamental than increased production, were after all sorer points with the people at large, and they were the first to which the Government turned. It is of especial note that the President himself, after analysis of the Federal Trade Commission's cost figures at the White House, fixed the basic prices for bituminous and later for anthracite coal, as well as jobbers' margins, before appointing a Fuel Administrator. But prior even to his putting a hand upon the alarming rise in coal prices, the President sought more efficaciously to distribute coal by appointing a new director of priority of transportation of freight.¹ The new director, under approval of the President, within three days after his appointment, directed that rail and steamship lines give bituminous coal shipments to the Northwest preference over all other shipments.² Now that a

¹ Judge Robert S. Lovett, appointed Aug. 2, 1917.

² A full account and copy of this important priority order may be found in the Commercial and Financial Chronicle, Aug. 25, 1917, p. 766.

law had passed, apparently the Government meant to lose no time before controlling the distribution and prices of coal.

An inquiry into the control that was exercised over coal prices leads naturally into a study of the prices fixed for bituminous coal at the mine, those fixed for anthracite coal at the mine, the margins established to prevent extortionate profit taking by middlemen, the control over coal at retail, and the peculiarly refreshing cost data that were later made the bases for coal price fixing.

PRICE FIXING OF BITUMINOUS COAL AT THE MINES.

The need for the fixing of a price for soft or bituminous coal in the summer of 1917 was, perhaps, more pressing than for fixing one for hard or anthracite coal. The production of bituminous coal, at any rate, makes up in bulk well above three-quarters of our annual total 500,000,000 tons of output and its rises in price were far more violent than those of hard coal. Of the total bituminous output, moreover, about 80 per cent goes to the railroad, public utility, and manufacturing industries which were our most vital secondary war-making weapons. It does not appear that the President entered again into protracted conferences with the industry, such as the Peabody-Lane conference or those which attended the later price fixing of iron and steel, while formulating the basic tentative prices which finally he announced from the White House on August 21, 1917.

Prices fixed by the President.—The President upon that day fixed a schedule of prices for all bituminous coal in the country, f. o. b. mine basis for tons of 2,000 pounds, "subject to reconsideration when the whole method of administering the fuel supplies of the country shall have been satisfactorily organized and put into operation." He further expressed an intention soon to control these prices not only at the mines but at wholesale and retail. The President, in the interest of fairness, divided the country into 29 coal districts and decreed that every producer in each district should market his coal at the particular price fixed there for coal, run of mine, prepared sizes and slack or screenings. These newly fixed prices ranged in the various districts from \$1.90 to \$3.25 for run of mine, \$2.15 to \$3.50 for prepared sizes, and \$1.65 to \$3 for slack or screenings.¹

¹ Regarding these prices, the President's statement said:

Figures submitted to the commission * * * show that most of the present prices now charged * * * are far in excess of cost as shown by the operators' books. Many of the operators frankly take the position that they are trying to get for their coal the highest prices possible under the present demand and are refraining, even at prices greatly increased over last year, from contracting their output to the extent of their usual custom. They defend this action by claiming that under the operations of the law of supply and demand they have for many years past been getting little more for their coal than the bare cost of production; that the mining of bituminous coal during that period has been a most unprofitable industry, and that this is their chance to recoup themselves for the losses of several years. Accordingly, they are demanding prices at the mine to-day which run from 50 per cent to several hundred per cent over the cost of their output.

These prices were, so the President said, "based upon the actual cost of production and deemed to be not only fair but liberal as well," and "under them the industry should nowhere lack stimulation."¹

The new soft coal prices ranged from 20 to 35 per cent under the maximum prices established on June 28, previous to the Peabody-Lane agreement. The Peabody-Lane prices for Pennsylvania coal had been \$3 for mine run and \$3.50 for domestic lump, egg, and nut. The President's prices were \$2 for mine run and \$2.25 for the prepared sizes. The Peabody-Lane prices for West Virginia coal were likewise \$3 for mine run and \$3.50 for domestic lump, egg, and nut, while the President's prices were \$2 and \$2.25, respectively. The Peabody-Lane prices for Illinois and Indiana coal were \$2.75 for mine run and steam sizes, and \$3.50 for screened domestic sizes. The President's prices, on the other hand, were \$1.95 for mine run and \$2.20 for prepared sizes. The new prices were, indeed, below the price tentatively fixed earlier by the Navy for Virginia coal at \$2.335.² Mr. C. E. Leshar, delegated from the Geological Survey for the statistical work upon coal at the Fuel Administration, very tersely remarks that the bituminous prices fixed by the President on August 21 were as far below the Peabody-Lane prices established June 28, as they in turn had been below the prevailing market.³

Modifications made by the Fuel Administrator.—The President, in his announcement of bituminous coal prices prior to his appointment of a Fuel Administrator, had taken especial care to designate them as tentative and subject to change by any fuel agency which might be created. The Fuel Administrator did, in point of fact, during the remainder of 1917 and particularly in 1918, make considerable modifications in general, and in particular districts, of the original prices. The Fuel Administrator, made aware of serious demands from miners for wage increases in West Virginia, Illinois, Indiana, Ohio, and other districts early in the fall, wrote the President⁴ and asked that bituminous coal prices be increased by enough to allow operators to satisfy wage demands. The President thereupon issued an Executive order, on October 27, 1917, to be effective October 29, 1917, allowing producers to add an additional

¹ Letter from the President, announcing the new coal prices, dated Aug. 21, 1917.

² It was estimated that the coal producers, under the new price, would have to refund approximately 13½ cents per ton to the Government, since the fixed price of \$2 per short ton was calculated as equal to \$2.20 per long ton. The Secretary of the Navy, when informed of the new Government prices, said in part:

"The Navy will, of course, get back any excess we paid in the \$2.335 advance, as it was agreed that this was merely a tentative figure. When I fixed that rate I took the highest price suggested by any one whose judgment of prices at the mine I listened to. I wanted to be sure that enough was paid, and resolved all doubt in favor of the coal dealers. I hope now that we will get coal at a reasonable figure."

³ "Prices of Coal and Coke," by C. E. Leshar, W. I. B. Price Bulletin No. 35.

⁴ Oct. 26, 1917.

45 cents for the bituminous coal at the mine to every price fixed on August 21, or subsequently modified.¹ It was later ruled by the Fuel Administration² that consumers having contracts for the purchase of coal, made before August 21, 1917; at prices below the President's prices, need not add 45 cents to those contract prices, when the early contracts contained no provision for a variation in price to correspond with changes in the wage scale. The 45-cent increase for bituminous coal was made generally applicable except for Alabama, a nonunion State.³ Alabama, because the Fuel Administration found her producers' and miners' committees in agreement upon a scale of wages, was excepted from the terms of the Washington wage agreement of October 6 and the Executive order of October 27, 1917.⁴

The Fuel Administrator, on the other hand, issued an order May 24, 1918, and effective the following day, reducing the price of all bituminous coal by 10 cents per net ton of 2,000 pounds, f. o. b. mines in various districts. The reduction pertained to all bituminous schedules, irrespective whether there had or had not been modifications of the President's prices, and was made in no way to affect the 45-cent increase that had been previously allowed.⁵ This reduction was made because of the estimated general leveling and lowering of costs of production, accomplished by the elimination of all prefer-

¹ There follows in full a copy of this important order, increasing the fixed price for bituminous coal by 45 cents subject to two exceptions, issued Oct. 27, 1917:

The scale of prices prescribed Aug. 21, 1917, by the President of the United States for bituminous coal at the mine, as adjusted and modified, by order of the United States Fuel Administrator, to meet exceptional conditions in certain localities, is hereby amended by adding the sum of 45 cents to each of the prices so prescribed or so adjusted and modified, subject, however, to the following express exceptions:

(1) This increase in prices shall not apply to any coal sold at the mine under an existing contract containing a provision for an increase in the price of coal thereunder in case of an increase in wages paid to miners.

(2) This increase in prices shall not apply in any district in which the operators and miners fail to agree upon a penalty provision, satisfactory to the Fuel Administrator, for the automatic collection of fines in the spirit of the agreement entered into between the operators and miners at Washington, Oct. 6, 1917.

This order shall become effective at 7 a. m. on Oct. 29, 1917.

² Jan. 25, 1918.

³ Alabama was excepted by order from the Fuel Administrator dated Oct. 31, 1917.

⁴ Alabama producers and miners, who had been allowed to make a separate and satisfactory agreement effective Feb. 6, 1918, came to a new agreement on Apr. 20, and they too were given the 45-cent increase (as of the order of Oct. 27, 1917) effective May 15, 1918.

⁵ The effect of the order making a reduction of 10 cents per net ton from the mine price on all bituminous coal shipped after 7 a. m., May 25, 1918, is that no one shall ask, demand, or receive more than the applicable Government mine price thus reduced for any coal shipped after 7 a. m., May 25, 1918, unless the same was shipped pursuant to a bona fide contract enforceable at law entered into prior to Aug. 21, 1917. Contracts made between Aug. 21, 1917, and Dec. 29, 1917, do not authorize any exception to the above. Contracts made after Dec. 29, 1917, must, under the provisions of the order dated Dec. 24, 1917, contained in Fuel Administration Publication No. 16, provide that all shipments thereunder shall be at the applicable Government mine price at date of shipment.

ments in car supply, brought about by the President acting through the United States Railroad Administration.

In addition to the above general increase of 45 cents above the President's prices, and later decrease of 10 cents per ton, applicable virtually to the whole lot of bituminous coal in the country, the Fuel Administrator made numerous lesser modifications of the President's prices within various particular districts. The general intent of these many district changes was to adjust more precisely the selling prices to the varying costs of each district by comparison with other districts, and of various sections within the same district. The President, for example, had fixed a flat price of \$2, run of mine, for all coal in Pennsylvania. Mr. Garfield, at different times, divided Pennsylvania into sections on the basis of similarity in production costs, and not only assigned each section of the district a separate fixed price in accordance with its costs of production, but increased those prices somewhat above the President's prices. The modified prices, without here designating the districts, ran \$2.25, \$2.75, \$2.60, \$2.60, \$2, \$2.50, \$1.90, and \$2.95, respectively. The Ohio prices which the President had fixed at \$2, run of mine (thick vein), and \$2.35 (thin vein), in like manner were modified to meet the costs instead of 24 different cost districts, and the prices of \$3.75, \$3.25, \$2, \$2.35, \$3, \$2.10, \$2.50, \$2.50, \$2.25, \$2.50, \$3, \$1.90, \$2.50, \$2.30, \$2.95, \$2.05, \$2.45, \$2.45, \$2.20, \$2.45, \$2.95, \$1.90, \$2.05, and \$2.50 established.¹ Perhaps the most important of the revisions made of the original prices were those for eastern Kentucky; Kanawha, W. Va.; Georges Creek, Md.; central Pennsylvania; and Hocking, Ohio. These typical illustrations and others which may be made for any particular coal district, show that the Fuel Administration did allot much more carefully than had the President, prices with respect to locality costs, and that it generally increased the President's prices.

A comparison of prewar and fixed prices.—It can not be said how much the fixing of bituminous-coal prices by the President and their subsequent control and modification by the Fuel Administration held prices down. It would be inaccurate, indeed, to compare the fixed prices with the previously tabulated market quotations for pre-regulation months, since the bulk of bituminous coal has always sold by contract and at much below the "spot" market. But in order that there might be afforded some rough measure of the actual realization prices, Mr. C. E. Leshar has prepared a unique scheme for the reduction of the preceding weighted market prices to theoretical

¹For a more detailed designation of the various new coal districts established by the Fuel Administration, and a comparison of the many modifications made of the President's prices, one should refer to the rules and regulations of the Fuel Administration appended to this inquiry.

realization prices.¹ These prices, which, perhaps, represent more accurately the true status of the weighted average bituminous coal market for the United States than any data that have been found, afford the best known basis for a comparison of bituminous prices before and after control. They give a fair measure of the actual movement of coal prices up to September, 1917, when price fixing had begun, and, therefore, a measure by which to compare the subsequent fixed prices.

WEIGHTED REALIZATION PRICES OF ALL BITUMINOUS COAL IN THE UNITED STATES.

ACTUAL PRICES PER NET TON.

Month.	1913	1914	1915	1916	1917	1918
January.....	\$1.22	\$1.17	\$1.16	\$1.19	\$1.48	\$2.19
February.....	1.18	1.16	1.16	1.17	1.48	2.20
March.....	1.17	1.16	1.15	1.15	1.45	2.21
April.....	1.17	1.17	1.12	1.20	2.30	2.71
May.....	1.17	1.17	1.12	1.20	2.44	2.75
June.....	1.17	1.16	1.11	1.20	2.46	2.66
July.....	1.17	1.16	1.11	1.20	2.30	2.66
August.....	1.18	1.17	1.11	1.20	2.31	2.67
September.....	1.18	1.16	1.12	1.23	2.12	2.57
October.....	1.19	1.16	1.12	1.29	2.12	2.67
November.....	1.19	1.16	1.13	1.45	2.19	2.67
December.....	1.18	1.16	1.16	1.48	2.19	2.67
Year.....	1.18	1.16	1.13	1.24	2.07	2.54

RELATIVE PRICES.

January.....	104	100	99	101	126	187
February.....	101	99	99	100	126	188
March.....	100	99	98	98	124	198
April.....	100	100	95	102	196	231
May.....	100	100	95	102	208	234
June.....	100	99	95	102	210	227
July.....	100	99	95	102	196	227
August.....	101	100	95	102	196	228
September.....	101	99	95	105	181	228
October.....	101	99	95	110	181	228
November.....	101	99	96	124	187	228
December.....	101	99	99	124	187	228
Year.....	101	99	96	106	175	218

¹ The method by which Mr. C. E. Leshar, of the United States Fuel Administration, reduced the spot prices, which are quoted previously in this chapter, to theoretical average realization prices was as follows:

An average realization per ton for each calendar year was obtained from the coal reports of the Geological Survey, by dividing the total dollars received f. o. b. mines by the total tons of each coal produced. This figure was an average for 12 months and if charted would be represented by a straight line, showing none of the monthly fluctuations which really took place. These annual averages, moreover, were for calendar years, whereas the annual break in average realization more nearly corresponds to the coal year beginning with Apr. 1. These annual average figures of realization, therefore, were arbitrarily moved forward 3 months, and the figures for the calendar year 1914 considered to apply to the 12-month period beginning Apr. 1, 1914, and ending

The comparison is facilitated by the reduction of the theoretical weighted realization prices to corresponding relative prices by adopting the average realization prices for the prewar year (July 1, 1913, to June 30, 1914) as a base equal to 100.

It is clear from this statistical picture that the actual reduction in bituminous-coal prices for the bulk of production, as affected by price fixing, was much less than might be supposed on looking at any compilation of market quotations for spot transactions. Indeed, there was no greater reduction than 32 cents per net ton from May, well before regulation, to October, 1917, after control had begun. And not again throughout the whole period of fuel control does this theoretical realization price fall as low as the October price (\$2.12). Instead, it begins a rise which reaches a record peak of \$2.75 per ton in May, 1918, nearly a year after the spot prices had reached their peak. It would seem clear that the control of bituminous coal scaled down tremendously the enormous and unprecedented rise which spot coal in the open market had attained during the six months prior to price fixing. But it is open to question whether there were such perceptible scalings in the sales which represented the bulk of bituminous transactions. The record height of these actual sales, for the country as a whole, came eight months after control had set in. Bituminous-coal prices, which were controlled in part to stimulate production, judging them as a whole and ignoring exceptions within particular districts,¹ did not maintain the lower level to which they were scaled by price fixing in the summer of 1917. They, whether measured by the spot prices or the realization prices, were brought down through price fixing to \$2.12 per ton in September, 1917, but rose to \$2.75 by May, 1918.

Mar. 31, 1915. Quite without regard to quantity of coal produced in any month, the spot prices for each coal year were reduced or raised proportionately, so that their arithmetic mean would equal the average realization. It was arbitrarily assumed that the average realization was represented by the sale price of coal delivered on contract, that the modified spot prices represented the price on current sales, and that three-quarters of the coal was sold on contract and one-quarter at the spot market. A figure for each coal for each month was thus calculated, i. e., three-quarters average realization and one-quarter spot, prices reduced to average realization. For the period from September, 1917, to December, 1918, the prices fixed by the Government were considered spot prices and from April to December, 1918, the same prices were taken for the spot reduced to average realization, since the actual realization for 1918 was not yet available. It is believed that these figures record more accurately the true price status of the coal market than do the spot prices. They are, at any rate, based upon the actual annual average return per ton of coal.

¹A study of the stabilizing effects of coal regulation may be made within each bituminous district by use of materials already segregated in "Prices of Coal and Coke," by C. E. Leshner.

PRICE FIXING OF ANTHRACITE COAL AT THE MINE.

It is to be remembered that hard or anthracite coal, which is used in the main by householders, constitutes only 15 per cent of our total coal production, and was not regulated by the earlier Peabody-Lane agreements or by the coal-production committee. The Federal Trade Commission, on the other hand, undertook during the spring of 1917 and until the President fixed anthracite prices, to control the prices of anthracite coal by various voluntary agreements which were entered into with the anthracite producers.¹ Anthracite prices, as a whole, were thus well under control by the summer of 1917, at the direction of Congress. These full data were presented to the President on August 22, and on August 23, 1917, he fixed the prices of anthracite coal for the country.

¹ There follows a chronological review in brief, authorized by the Federal Trade Commission, of each important agreement looking to a regulation of anthracite coal prices, between the Federal Trade Commission and the anthracite producers up to the time of the President's prices (Aug. 23, 1917):

1. See letter of commission dated Mar. 12, 1917, to 25 principal anthracite operators concerning rumored suspension of spring discounts (see Exhibit I, p. 371, S. Doc. No. 50, 65th Cong., 1st sess.). With this letter the commission inaugurated a policy of endeavoring to limit the price of anthracite to domestic consumers.

2. The May price on anthracite egg, stove, and chestnut sizes virtually was fixed for coal produced by railroad coal companies through publication of the commission's interim report to the Senate (see Schedule Exhibit II, p. 373, S. Doc. No. 50). This report followed conferences with the so-called railroad coal company operators early in May. To May prices add 10 cents per ton of 2,240 pounds each succeeding month, up to and including August, 1917, to ascertain approximate f. o. b. mine prices on the sizes mentioned, charged by the railroad coal companies. By adding another 10 cents, the price fixed by the President on these sizes, effective Sept. 1, 1917, is obtained. Broken, pea, and buckwheat sizes were not the subject of agreement, since they have a large industrial use, and the commission was concerned principally with the prices of sizes most in use by domestic consumers.

3. Later in May (about the 11th) a conference was held with individual operators to discuss their prices, since the individual output continued to go out at high prices (reaching as high as \$8 and \$8.50 per ton of 2,240 pounds f. o. b. mines in some instances). This conference is discussed in Commissioner Colver's testimony, par. 1, p. 264, Pt. I of the hearing before the Committee on Interstate Commerce. Jobbers' and retailers' representatives also were present at this conference. No fixed price was agreed on with individual operators at this conference, but high prices realized by individual operators were severely criticized by the commission.

4. The commission's letter of May 14, 1917, Exhibit IV, pp. 374, 375, Senate Document No. 50, and the form of weekly report printed on p. 376, that was required of individual operators for the last part of May, 1917, was the first intimation given them concerning what the commission considered the maximum permissible f. o. b. mine prices for their output of egg, stove, chestnut, and pea sizes, when sold for domestic consumption. This price (May) was 35 cents per gross ton above the railroad coal company prices already referred to on egg, stove, and chestnut (no price for pea was agreed on with the railroad coal companies).

Subsequently it was found that it would be difficult or impossible to hold all individual operators to these prices, and the June reports for individual operators (printed on p. 377, S. Doc. No. 50) provided for a maximum differential of 75 cents per gross ton over the railroad coal company prices. Ten cents per ton of 2,240 pounds was added for each month up to and including August, 1917. In this connection it should be noted that all individual operators did not avail themselves of the full differential. For instance, the Kingston Coal Co., the largest individual operator, with a total yearly tonnage (all sizes) of 1,200,000 tons, at no time took more than 35 cents. It was agreed with representatives of the individual operators that this differential should not at that time be made applicable to egg and pea coal sold for industrial use, provided that the

Prices fixed by the President, August 23, 1917.—The President's maximum prices for anthracite coal, announced like those for bituminous coal before he had appointed his Fuel Administrator,¹ were to be effective September 1. They were virtually the same as the prices then charged at the mines under the voluntary agreement made by the producers with the Federal Trade Commission, if indeed not slightly higher.² The one exception to this rule was pea coal, which was increased above the market upon recommendation of the Federal Trade Commission, but which was subsequently reduced by 60 cents

normal percentage of the total output of each operator sold for these purposes were not exceeded, and that no attempt should then be made to limit the price on broken and buckwheat sizes, generally used in the industries.

For the purposes of observing the proportion of controlled and uncontrolled sizes produced by individual operators, monthly reports were required; and these were checked with the percentages of the different sizes that were normally produced (see Forms 3 and 3A, reproduced on p. 379, S. Doc. No. 50).

It should be remarked that some independent operators voluntarily abrogated contracts made at higher prices than those suggested as the limitation maximum, and shipped the coal so contracted for at the lower prices suggested as permissible maxima by the commission.

The commission's views respecting limitation maximum f. o. b. mine prices were reinforced by agents in the anthracite fields who frequently called upon operators for inspection of their sales records, consultations, etc.

5. Several jobbers attended the conference of May 11 by invitation, and while no agreement was then made respecting a limitation jobbers' margin on anthracite coal, the commission's views respecting exorbitant margins, and on interbuying among jobbers with the consequent multiplication of jobbers' margins, were made known to them.

About the middle of May or shortly afterwards, the commission began to express informally to leading jobbers its view that 20 cents per ton of 2,240 pounds should be the maximum jobbers' margin on anthracite shipped to Buffalo, or points east of Buffalo, that 25 or 30 cents should be the maximum on shipments west of Buffalo, and that the combined margins of any number of jobbers handling a given shipment should not exceed these maxima.

A system of weekly reports from jobbers also was inaugurated in May. (See letter of commission to jobbers and report required, reproduced as Exhibit VIII, pp. 382, 383, 384, S. Doc. No. 50.)

The commission's views respecting limitation jobbers' margins on anthracite were communicated to all anthracite jobbers in its letter of June 9. (See Exhibit IX, p. 385, S. Doc. No. 50.)

Field agents of the commission reinforced the commission's views as to jobbers' margins by frequent inspection of jobbers' records, interviews, etc.

6. At the conference of May 11 several representatives of retailers' associations were present by invitation. They were given an opportunity to hear the commission's views on excessive prices, but no agreement was attempted respecting retailers' margins.

Subsequently the commission sent to retailers in many different cities letters and forms similar to those shown in Exhibit X, pp. 385, 386, 387, 388 of Senate Document No. 50. From these forms comparative statements of tonnage received in given cities or towns during stated periods were compiled, the gross margins of retailers in those towns or cities were computed, and the results given publication through the local press. The commission counted on such publicity to restrain retail dealers' margins to a certain extent, and while no names were published, except in Washington and Indianapolis, these press statements no doubt had some effect in restricting retail margins and prices during the summer and fall of 1917.

7. The commission's activities in the matter of anthracite pea control were placed fully before the President on Aug. 22, before the anthracite prices effective Sept. 1, 1917, were fixed by him.

¹Mr. Harry A. Garfield, president of Williams College and chairman of the wheat price-fixing committee of the Food Administration, was appointed the same day (Aug. 23, 1917).

²Mr. David L. Wing of the Federal Trade Commission, in his testimony at the coal hearings referred to previously, declared that the President's prices were found by adding 10 cents. (See Exhibit No. 272, p. 914 of printed hearings, pursuant to S. Res. 163, 65th Cong. 2d sess.)

per gross ton by the Fuel Administration on October 1, 1917. The new anthracite prices, fixed for broken, egg, stove, chestnut, and pea coal under each of the three grades, white ash, red ash, and Lykens Valley, varied from \$4 to \$4.50 per ton of 2,240 pounds f. o. b. cars at the mine. The President, curiously, made the new prices applicable specifically to 16 leading Pennsylvania anthracite producers whom he named in the price-fixing announcement. It was then provided that anthracite producers, other than the 16 named, should not sell anthracite coal at prices to exceed by more than 75 cents per ton the schedule established for the larger producers.¹ The anthracite schedule of fixed prices showed important and interesting variations in practice from the earlier bituminous schedule.

Modifications made by the Fuel Administrator.—The Fuel Administrator made more modifications of a general character in the President's anthracite prices than in his bituminous prices. The whole schedule of anthracite prices, as fixed by the President August 23, was increased by Executive order to be effective December 1, 1917, to allow an addition of 35 cents per gross ton for each fixed price. That modification was made to provide for wage increases authorized by the President. The usual summer reductions in the prices of

¹ There follows so much of the President's order of Aug. 23, 1917, as pertains to the fixing of anthracite coal prices at the mine:

4. Effective Sept. 1, 1917, the maximum prices per ton of 2,240 pounds free on board cars at the mines for the grades and sizes of anthracite coal hereinafter specified shall not exceed the prices indicated in par. 5 when such coal is produced and sold by the Philadelphia & Reading Coal & Iron Co., Lehigh Coal & Navigation Co., Lehigh & Wilkes-Barre Coal Co., Hudson Coal Co., Delaware & Hudson Co., Scranton Coal Co., Lehigh Valley Coal Co., Coxe Bros. & Co., Pennsylvania Coal Co., Hillside Coal & Iron Co., Delaware, Lackawanna & Western Railroad Co., Delaware, Lackawanna & Western Coal Co., Susquehanna Coal Co., Susquehanna Collieries Co., Lytle Coal Co., or the M. A. Hanna Coal Co.

5. The grades and sizes for which the maximum prices are specified are as follows: White ash anthracite coal of the grade that between Jan. 1, 1915, and Jan. 1, 1917, was uniformly sold and recognized in the coal trade as coal of white-ash grade; red-ash anthracite coal of the grade that between Jan. 1, 1915, and Jan. 1, 1917, was uniformly sold and recognized in the trade as coal of red-ash grade; and Lykens Valley anthracite coal that is mined exclusively from the Lykens Valley seams and of the grade that between Jan. 1, 1915, and Jan. 1, 1917, was uniformly sold and recognized in the coal trade as coal of Lykens Valley grade.

White-ash grade:

Broken-----	\$4.55
Egg-----	4.45
Stove-----	4.70
Chestnut-----	4.80
Pea-----	4.00

Red-ash grade:

Broken-----	\$4.75
Egg-----	4.65
Stove-----	4.90
Chestnut-----	4.90
Pea-----	4.10

Lykens Valley grade:

Broken-----	\$5.00
Egg-----	4.90
Stove-----	5.30
Chestnut-----	5.30
Pea-----	4.35

6. Producers of anthracite coal who are not specified in par. 4 shall not sell the various grades and sizes of anthracite coal at prices that exceed by more than 75 cents per ton of 2,240 pounds free on board cars at the mines the prices enumerated in par. 5; provided that any producer of anthracite coal who incurs the expense of rescreening it at Atlantic or Lake ports for transshipment by water may increase the price thereof by not more than 5 cents per ton of 2,240 pounds.

7. Producers of anthracite coal specified in par. 4 of these regulations shall not sell anthracite coal to producers of anthracite coal not specified in par. 4.

8. Dealers and selling agents shall not sell coal produced by the producers included in par. 4 on the basis of the prices fixed at the mine for coal produced by producers not specified in said paragraph.

domestic sizes were offered to the trade by the producers in 1918, although not required by the Fuel Administrator. Still a further and much greater increase, \$1.05 per gross ton, was allowed to the prevailing maximum prices for Pennsylvania anthracite coal by the Fuel Administrator after November 1, 1918. This modification, too, was made to provide for increased costs of production and for wage increases.¹ Two weeks later (November 15) a maximum price for steam sizes of anthracite coal was fixed for the first time by the President.²

A comparison of prewar and fixed prices.—The stabilizing effects of coal regulation upon the prices of anthracite can be more easily measured than those of bituminous coal. There are, however, certain very marked seasonal fluctuations in the prices of anthracite which must be held firmly in mind while attempting any measure. The anthracite producers, in order to make for uniform operations at the mines during the slack part of each year, have for years offered a reduction of 50 cents a gross ton each April for all purchases of domestic sizes, followed by a reduction of 40 cents in May and a 30 cents reduction in June, 20 cents in July, and so on until September, when the normal price would be again reached. These summer reductions have become so much a factor in the general level of anthracite coal prices that they constitute the primary fluctuation during the year. Prices of anthracite coal ordinarily remain fairly level until April, fall several per cent, and come gradually back to normal, reaching their level again in September. But these important seasonal fluctuations of anthracite coal are concealed by the much larger and more irregular fluctuations since the latter part of 1916.

The only available method by which to judge the stabilizing effects of price fixing upon the prices of anthracite coal, as was the case with bituminous coal, is to compare the prices before and after control. It can not, of course, be concluded hastily from that comparison whether coal regulation was or was not effective, since there was presented to it the problem not only of stabilizing prices, but of stimulating production. The theoretical realization prices for all anthracite coal in the United States, in contrast to those prices

¹The engineers committee of the Fuel Administration, through Mr. R. V. Norris, makes the following summary and observations relative to labor increases which entered into the prices of anthracite coal:

Effective Dec. 1, 1917, a labor war bonus, ranging from 60 cents to \$1.10 per day for labor and 25 per cent for contract miners was granted over and above the wage scales effective by agreement Apr. 1, 1916, expiring Apr. 1, 1920, and the prices fixed Aug. 23, 1917, and modified Oct. 1, 1917, by reducing pea coal 60 cents per ton, were increased by 35 cents per ton to compensate for this labor increase. The actual reported increase in labor cost due to this advance was figured by the Federal Trade Commission from the operators' reports to be 60.3 cents. From the actual pay-roll figures later obtained by the U. S. Fuel Administration, this increase was found to be 70.3 cents per ton.

²The maximum price thus established was 50 cents a ton less than that fixed for pea coal.

for bituminous coal, show a rise very similar to the spot prices. There are printed here, therefore, only the relative prices, taking the prewar year (July 1, 1913, to June 30, 1914) as a base equal to 100, for the series of realization prices,¹ because of the marked similarity between them and the less adequate spot prices.

WEIGHTED REALIZATION PRICES OF ALL ANTHRACITE COAL IN THE UNITED STATES.

ACTUAL PRICES PER GROSS TON.

Month.	1913	1914	1915	1916	1917	1918
January.....	\$2.69	\$2.66	\$2.58	\$2.60	\$3.08	\$3.63
February.....	2.64	2.65	2.57	2.59	3.09	3.60
March.....	2.63	2.65	2.56	2.58	2.97	3.63
April.....	2.50	2.44	2.44	2.70	3.08	4.31
May.....	2.52	2.47	2.46	2.66	3.45	4.31
June.....	2.56	2.49	2.48	2.67	3.36	4.34
July.....	2.57	2.52	2.49	2.71	3.37	4.30
August.....	2.61	2.55	2.52	2.75	3.39	4.33
September.....	2.65	2.58	2.57	2.79	3.47	4.54
October.....	2.65	2.58	2.58	2.84	3.47	4.54
November.....	2.65	2.58	2.58	3.09	3.50	5.30
December.....	2.65	2.58	2.59	2.99	3.63	5.30
Year.....	2.60	2.56	2.54	2.74	3.32	4.35

RELATIVE PRICES.

Month.	1913	1914	1915	1916	1917	1918
January.....	104	103	99	100	119	140
February.....	102	102	99	100	119	139
March.....	101	102	99	99	114	140
April.....	99	94	94	104	119	166
May.....	97	95	95	103	132	166
June.....	99	96	96	103	129	167
July.....	99	97	96	104	130	166
August.....	101	98	97	106	131	167
September.....	102	99	99	108	134	175
October.....	102	99	99	109	134	175
November.....	102	99	99	119	135	204
December.....	102	99	100	115	140	204
Year.....	101	99	97	106	128	167

The weighted average realization prices for all anthracite coal sold in the United States, made by abstracting some 5,000 quotations and reducing them to a basis at which, it is estimated, the bulk of sales were made, shows an exceedingly steady market during 1913, 1914, and 1915. Anthracite coal in the latter part of 1916, however, began a rise which continued steadily in the main until the end of 1918. The general price held steady for a brief space only at \$3.47 per ton, following the President's first announcement, and then rose in the latter part of 1917 by reason of the increase of 35 cents per ton that was allowed, effective December 1. The price rose from \$3.63 per ton in December, 1917, and January, 1918, steadily, except for slight reductions during the summer, to the latter part of 1918, when

¹ These realization prices were made by C. E. Lesher in like manner to the realization prices previously printed for bituminous coal. A study of the spot or market prices for anthracite coal may be made from Mr. Lesher's pamphlet.

another increase of \$1.05 was allowed. The price realized for anthracite coal throughout the country as a whole, thus advanced rather steadily under Government regulation, from the time control set in until after the signing of the armistice. It made during that time a gain from \$3.47 per ton in September, 1917, to \$5.30 in November, 1918.

CONTROL OVER THE PRICES OF COAL MIDDLEMEN.

Jobbers' margins.—It must have been obvious to the President at the outset that, while the fixing of fair prices for coal at the mine would stimulate production, it would not insure against extortionate profits to middlemen. He, in his first announcement of bituminous prices, gave promise soon of a fair and equitable control of prices for sales by middlemen and retailers. The President's order of August 23, fixing prices of bituminous coal at the mine, left middlemen and retailers a free hand to charge consumers what they would. But on August 23, 1917, in the same order by which he also fixed anthracite coal prices, the President set certain jobber margins. Bituminous coal jobbers, by that order, were not allowed to add to their purchase price a gross margin above the fixed price in excess of 15 cents per ton of 2,000 pounds, nor were the combined gross margins of a number of jobbers allowed to exceed that amount. Anthracite coal jobbers were not allowed a gross margin above the fixed price in excess of 20 cents per ton of 2,240 pounds when delivery was at or east of Buffalo, or in excess of 30 cents for delivery west of Buffalo.¹ The modifications of these original margins made by the Fuel Administration were of less importance than its changes in prices fixed by the President.²

¹The sections of the President's order of Aug. 23, 1917, which relate to bituminous and anthracite jobber margins follow:

1. A coal jobber is defined as a person (or other agency) who purchases and resells coal to coal dealers or to consumers without physically handling it on, over, or through his own vehicle, dock, trestle, or yard.

2. For the buying and selling of bituminous coal a jobber shall not add to his purchase price a gross margin in excess of 15 cents per ton of 2,000 pounds, nor shall the combined gross margins of any number of jobbers who buy and sell a given shipment or shipments of bituminous coal exceed 15 cents per ton of 2,000 pounds.

3. For buying and selling anthracite coal a jobber shall not add to his purchase price a gross margin in excess of 20 cents per ton of 2,240 pounds when delivery of such coal is to be effected at or east of Buffalo. For buying or selling anthracite coal for delivery west of Buffalo a jobber shall not add to his purchase price a gross margin in excess of 30 cents per ton of 2,240 pounds. The combined gross margins of any number of jobbers who buy and sell a given shipment or shipments of anthracite coal for delivery at or east of Buffalo shall not exceed 20 cents per ton of 2,240 pounds, nor shall combined margins exceed 30 cents per ton of 2,240 pounds for the delivery of anthracite coal west of Buffalo. Provided that a jobber's gross margin realized on a given shipment or shipments of anthracite coal may be increased by not more than 5 cents per ton of 2,240 pounds when the jobber incurs the expense of rescreening it at Atlantic or Lake ports for transshipment by water.

²For a full compilation of all subsequent orders relating to jobbers' margins, one should consult "General Orders, Regulations, and Rulings" of the Fuel Administration, Chapter III, Title IX; Chapter II, Title IV; Chapter III, Title VII; and notes under each.

Distributors' margins.—It became necessary in the spring of 1918 to bring certain distributors under license control in order to administer regulation more effectively. A presidential proclamation,¹ accordingly, was issued requiring all distributors of coal or coke as jobber, broker, selling agent, or "in any capacity whatever," to secure a license on or before April 1, 1918,² from the Fuel Administrator and under such conditions as might be prescribed by him.

Mr. Garfield then issued an order with the approval of the President, prescribing that licensees who sell coal or coke without physically handling it should not ask more than the prevailing fixed price plus 5 cents per ton of 2,240; and licensees who act as purchasing agents without becoming the owner might charge a purchasing commission not in excess of 15 cents per ton of 2,000 pounds of bituminous coal, or 20 cents per ton of 2,240 pounds of anthracite coal for delivery at or east of Buffalo and 30 cents for delivery west.³

CONTROL OVER COAL AT RETAIL.

One of the most difficult tasks of the war-time control over fuel was the regulation of the retail prices of coal. The Fuel Administrator, realizing the prime necessity of assuring stable prices to the small purchasers and consumers, set forth a scheme for the control of retail coal prices as early as October 1, 1917. The administration of the plan involved, of course, the assistance of the State and local committees, of whom there were legion.⁴

No retail dealer under the plan was allowed to charge consumers a retail gross margin of coal or coke in excess of the average gross margin, above his average cost, added by the same dealer during 1915, plus 30 per cent of the 1915 margin.⁵

A measure of the movement of retail prices, before and after regulation, is given in the table below. This table shows average and relative retail prices, as compiled by the Bureau of Labor Statistics, for Pennsylvania white-ash coal, both stove and chestnut sizes, and bituminous coal for the United States on January 15 of each year, 1913 to 1919, inclusive. An average price for the year 1913 has been made from the averages for January and July of that year. This

¹ This proclamation, issued under authority of the food and fuel act, was made Mar. 15, 1918.

² An exception was made to those specifically exempted by the food and fuel act, producers and miners of coal and manufacturers of coke, distributing exclusively their own product, and retail dealers, as defined in the Fuel Administrator's order of Oct. 1, 1917.

³ A full listing of all orders relating to licensed distributors may be found in Fuel Administration "General Orders, Regulations and Rulings," Chap III, Title IX, sec. 2.

⁴ See fuel orders referred to above, Chap. II, Title VI, for full retail price regulations.

⁵ Provided that the retail gross margin added by any retail dealer should in no case exceed the average added by such dealer for the same size and grade during July, 1917.

average price for the year 1913 has been divided into the average price for January of each subsequent year to obtain the relative prices.

Since January, 1913, Pennsylvania white-ash stove coal has advanced 44 per cent, chestnut 42 per cent, and bituminous coal 44 per cent. The first big jump in the price of all kinds of coal came in the year from January 15, 1917, to January 15, 1918. Another interesting fact is that in the last year, from January 15, 1918, to January 15, 1919, stove coal increased 17 per cent, chestnut 16 per cent, while bituminous coal increased only 3 per cent.

AVERAGE AND RELATIVE RETAIL PRICES OF COAL IN TON LOTS, FOR HOUSEHOLD USE, JAN. 15 OF EACH YEAR, 1913 TO 1919, INCLUSIVE.

[Average price for year 1913=100.]

Period.	Pennsylvania anthracite, white ash.				Bituminous.	
	Stove.		Chestnut.			
	Average price.	Relative price.	Average price.	Relative price.	Average price.	Relative price.
Average for year 1913.....	\$7. 73	100	\$7. 91	100	\$5. 41	100
Jan. 15, 1913.....	7. 99	103	8. 15	103	5. 48	101
Jan. 15, 1914.....	7. 80	101	8. 00	101	5. 97	110
Jan. 15, 1915.....	7. 83	101	7. 99	101	5. 71	106
Jan. 15, 1916.....	7. 93	103	8. 13	103	5. 69	105
Jan. 15, 1917.....	9. 29	120	9. 40	119	6. 96	129
Jan. 15, 1918.....	9. 88	128	10. 03	127	7. 68	142
Jan. 15, 1919.....	11. 52	149	11. 61	147	7. 90	146

SPECIAL PRICES, PREMIUMS, AND CHARGES.

In addition to the prices fixed at the mine, margins for middlemen and retailers, various special prices, premiums, and charges determined by the Fuel Administration were also established.¹ These in the main pertained to smithing coal, cannel coal, export and bunker coal, coal at Lake Michigan and Lake Superior docks, and coal from wagon mines, prices of specially prepared coal and coal not properly picked or cleaned, and miscellaneous orders affecting the delivered price of coal.

COSTS MADE THE BASIS OF PRICE FIXING.

The coal prices fixed by the Fuel Administration were based upon scientific analyses of costs conducted by a special committee. Neither the price-fixing committee nor the Food Administration to any extent availed themselves of a detached scientific committee whose business it was to analyze for them and interpret the cost sheets prepared by the Federal Trade Commission. The Fuel Adminis-

¹ See fuel orders referred to above, Chap. II, Title IV, secs. 1, 2, 3, 4, 5, 6, and 7.

tration, indeed, during 1917 and until early in January, 1918, took the President's tentative prices as the basis for all revisions and adjustments without serious inquiry into their justice.¹ But early in 1918 the Fuel Administrator appointed his notable committee of engineers to make a painstaking and general review of all coal-production costs in the United States and to recommend to him scientific verification or revision of each price tentatively fixed.² The Fuel Administration thus, more than any other of the larger price-control agencies, made intensive and highly specialized studies of production costs. It, unlike either the price-fixing committee or the Food Administration, was concerned primarily with the price fixing of but a single commodity—coal—and could make close analyses of costs for various parts of the country. The elaborate confidential cost tables worked out by the engineers' committee for Mr. Garfield, though happily as often useful to verify as to revise former prices, gave very comprehensive bases for the fixing of bituminous and anthracite coal prices.

The engineers' committee at the outset determined upon a method for arriving at a fair price for coal. It considered the (a) straight cost-plus method—the actual cost at each colliery plus a fixed sum or percentage of profit; (b) modified cost-plus method—the actual cost at each colliery plus a graduated profit decreasing as costs increase; (c) average cost methods—prices fixed on the average cost in each district; and, (d) pooling methods—all coal sold at the average cost of each district plus a profit, and the returns to each colliery adjusted through a clearing house at a price proportioned to its cost of production.³

¹ These prices, though perhaps made upon a better body of fact than were a majority of prices fixed, were based on average figures of approximately 100,000,000 tons' production, prepared by the Federal Trade Commission. They were relatively meager data, comprising generally costs from the larger and lower-cost operators of each district.

² In January, 1918, Mr. Garfield appointed three mining engineers, Mr. Cyrus Garnsey, jr., Mr. R. V. Norris, and Mr. J. H. Allport, to constitute the engineers' committee of the Fuel Administration. They were men of scientific training and considerable practical experience. The committee was not authorized itself to fix prices of coal, but to study and report upon methods of price fixing and to present the Fuel Administrator with comprehensive cost data.

³ Mr. Cyrus Garnsey, jr., Mr. R. V. Norris, and Mr. J. H. Allport, in Publication No. 29, of the Fuel Administration, issued September 20, 1918, outline the following advantages and disadvantages of each of these methods:

1. *Straight cost-plus method—Advantages.*—(a) All producers would receive the same profit, and no one would have an advantage over another in this respect. (b) Apparently simple in plan and execution.

Disadvantages.—Impracticable of application, by reason of: (a) Resultant multiplicity of prices, with grave disturbance of markets. (b) Continual changing of prices due to inevitable variations in each producer's costs. (c) Instability of the industry, due to the natural disposition of consumers to purchase the lowest-price coal. (d) Inefficiency in operation always resulting from lack of incentive in cost-plus operations. (e) Material reduction in output and reduction in quality, due to the natural tendency to mine the poorer and more expensive coal with a guaranteed profit, and to leave the better and cheaper coal in reserve to be mined on the return of normal conditions. (f) Continual increase in all costs incident to extravagant methods encouraged by guaranteed

It seemed to the engineers' committee that they must find a system of price fixing which would meet especially these requirements:

1. A price fair to the public.
2. Prevent excessive prices or profiteering. ✓
3. Prevent a multiplicity of prices in any district.
4. Encourage legitimate production.
5. Discourage production from inefficient and unduly costly operations.

profits. (g) Labor unrest and constant demands for increases due to the knowledge of a guaranteed profit regardless of cost. (h) Practical impossibility of arriving with technical accuracy at the costs of each separate operation. (i) Impracticability of the Government's policing the mines and securing the same efficient operation and production attained by the individual producer under the stimulus of increased profits. (j) Illogical, in that the better planned and managed operations are discouraged, as compared with poor and inefficiently managed properties.

2. *Modified cost-plus method.*—This is but a modification of the preceding, and the same discussion applies, modified only by the inclusion of a somewhat greater incentive to the better and more economical operations.

3. *Average cost methods—Advantages.*—A minimum uniform price for each district or, if desired, for the entire country. *Disadvantages.*—(a) The average cost is necessarily less than the cost of about half the total tonnage. Hence, a reasonable profit put on the average cost would not produce the necessary tonnage. (b) The tonnage below and up to the average cost is actually produced by less than 30 per cent of the operators of the country. Hence, the great majority of the operators producing at above average cost would be put out of business by a price based on the average.

4. *Pooling methods.*—Pooling may be done on either cost-plus, modified cost-plus, or on the prices established by the United States Fuel Administration. *Advantages.*—(a) A uniform price to consumers for sections and, if desired, for the entire country. (b) A present lower price to consumers based on weighted average cost. (c) A simplification of all present pooling arrangements, as all coal to each pool would have, or could be arranged to have, the same price. (d) A return to the consideration of quality instead of cost, as, with all coal at the same price to consumers, the higher qualities would naturally be preferred. *Disadvantages of pooling cost-plus or modified cost-plus methods.*—(a) Continual variation in pool prices, due to inevitable variations in producers' costs. (b) Unfair and illogical, in that the better located and managed operations are made to pay tribute to the poor and badly managed ones. (c) A general and considerable increase in cost inevitably resulting from any method involving guaranteed profits with a disregard of economy. (d) A material reduction in output, due to lack of incentive and resulting inefficient methods, the employment of unnecessary labor, the mining of the more expensive and less desirable qualities of coal for the ultimate benefit of the mines, and the execution of development not immediately needed. (e) A slackening of the efforts of employees, which is the usual result of a lack of incentive to the producer, with the resulting lack of interest. (f) The installation of an unsound policy tending to encourage the inefficient and discourage the efficient producer. (g) The ever-present temptation to allow costs to increase with the hope of readjustment of prices. (h) Dissatisfaction to both labor and to producers from the knowledge that other and less efficient operations have higher limits of price. The disadvantage of pooling on the prices fixed by the United States Fuel Administration are the same as suggested above, without some of the special disadvantages of cost-plus methods. *Disadvantage of pooling in general.*—(a) A very large capital required to handle such stupendous operations. (b) Enormous and extended credits required to finance the producers. (c) Lack of organization to handle this new business. (d) Undesirability of creating an organization with its army of additional employees at the present time. (e) Inadvisability of putting a new and untried plan into operation at the present time. (f) Impossibility of obtaining, with sufficient promptness, the costs necessary to fix pooling prices with the necessary accuracy. (g) Interference with present established methods of handling coal, with serious risk of crippling its distribution and unnecessarily creating a shortage.

None of these suggested methods seemed to fill the peculiar conditions incident to price-fixing of coal at the mines, and it devolved upon the engineers' committee to develop some method better suited to the conditions of the problem.

6. Insure to the producer "the cost of production, including the expense of operation, maintenance, depreciation, and depletion, with a just and reasonable profit," as required by the Lever Act.

The committee determined finally that it could best attain these ends by finding the bulk line of production, and allowing the Fuel Administrator personally to add whatever margin in his judgment each district required. Costs, accordingly, were obtained from the Federal Trade Commission as filed by each operator in the country, and were studied by the committee, listed and adjusted¹ for price fixing. These data, together with the percentages of each cost in the total production of each district, were plotted to show graphically the range and extent of variation in each district. Then, upon these diagrams, was drawn the bulk line, showing the indispensable tonnage required from that district.²

When the committee set about its inquiry early in 1918, it had costs for the production of coal in the United States during August and September, 1917. These data, together with later reports, were generally used as a basis of costs.³

Bituminous costs.—The committee, confronted with a confusing mass of cost figures representing 95 per cent of the bituminous production of the country, evolved a scheme of unique graphic presentation which made comparisons simple. It made for each coal

¹ Many, especially of the small operators, were inexperienced in bookkeeping, and submitted cost sheets which, while accurate in totals, were grievously mixed in details. The most common of the cost adjustments which were made pertained to supplies, reserves, salaries, special charges, outside profits, and fuel charges for colliery power. These adjustments of the Federal Trade Commission cost figures were made simply to put all costs on the same basis.

² Since the "bulk line" of production, adopted by the Fuel Administration, came so prominently into the consideration also of the price-fixing committee, it is of especial interest to note the following frank outline of its merits and demerits by the engineers' committee, who recommended it to the Fuel Administration.

Advantages of the "bulk line" system.—The method of fixing prices by the "bulk line" principle recognizes the economic syllogism that "the price of any article necessary to a community will be fixed by the cost of producing that necessary portion of such article involving the greatest expense." (a) This assures to all producers profits dependent upon their ability and exertions, only limited by the establishment of a reasonable price to the consumer. (b) It does not unduly increase the price of coal to the consumer over the minimum price possible under other methods. (c) It tends to encourage maximum production and necessary development by allowing to the producer the benefit of reduced costs due to greater production. (d) It avoids bad feeling among the producers and among the workmen by allowing a fixed price in each district and not apparently showing favoritism to special producers. (e) It tends to encourage the fit and discourage the unfit. (f) The method is susceptible of refinement and extension, making it possible to eliminate undue profits to the producer and adjust prices from time to time to the ultimate advantage of the consumer.

Disadvantage of the "bulk line" system.—(a) Considerable profits to the lowest-cost operators. (b) A price for coal greater than one based on the average cost, by the amount by which the "bulk line" exceeds such average.

This method appeared to be better suited to the conditions than any of the others suggested, and after a careful study by the United States Fuel Administrator it was adopted.

³ It is of interest that the committee later found, when cost data for extended periods were had, that the two months mentioned above were fairly representative, as to cost, of the average year.

district in the country, of which there were 99, a graph showing horizontally from left to right various percentages of production from 0 to 100. That same graph, when read vertically from the lower left corner, showed various unit costs of production per ton from 0 to the highest cost found. There were then drawn upon each chart the total costs for the district, as reported and also as adjusted, beginning at the lowest cost and the tonnage which could be produced at that unit cost. The two cost lines thence (i. e., the reported and adjusted cost lines) were made gradually to rise from this lowest to the very highest cost in the district, showing constantly the increased production that could be had with each increase in cost. The bulk line, between these two extremes, represented the percentage of production required and marked, therefore, the basis for fixing a price. The bulk line usually was fixed at a point to assure the production at a minimum of profit, of 90 per cent of the total capacity, thus cutting off the upper crust of high-cost producers.¹ The bulk line of the chart, after adding whatever margin was determined upon by the Fuel Administrator, gave the necessary realization for run-of-mine coal in that district. Spreads were, however, frequently added to this price to make possible screening and special prices for prepared sizes.

A study of the average costs, bulk line, and prices fixed for 84 per cent of the bituminous coal production in the United States during August and September, 1917, gives interesting generalizations.² The weighted average margin between costs and the prices fixed for substantially the entire bituminous production of the country was 45.6 cents. It is of equal interest that the weighted average margin between the bulk line, which represents the highest price necessary to produce any part of the necessary coal, and the prices fixed by the Fuel Administrator was 26 cents.³

¹ These include: Mines which have failed under normal competitive conditions and have been reopened under the stimulus of the high prices preceding Government control; mines abandoned as exhausted and reopened for the few remaining pillars; new enterprises in the development stage; mines opened on beds so thin or of such poor quality that they could not operate under normal conditions; small mines on outcrop coal, often of poor quality, which have neither capital nor equipment for economical working; mines which have encountered faults or in which the coal has thinned or split, or the quality has so deteriorated as to prevent working at a reasonable cost; and, not the least of this group, mines so badly managed as to show unwarrantable costs of operation.

All these classes of mines are unjustifiable under war conditions. They use labor inefficiently. Often their records show less than half the tonnage per employee usually obtained in their district, and their elimination is an economical advantage to a district in releasing labor to more efficient mines.

In this high-cost group occasionally are found mines which have a coal of unusually high quality or fitted for special use, for which a market at prices above those of the district has always existed. Such mines, on proving their special conditions, may receive consideration for special prices sufficient to allow a fair profit on their higher costs.

² See bituminous chart in section on "The determination of a fixed price."

³ The engineers' committee add that:

The average cost of the 84 per cent of the total coal represented for the two months of August and September, 1917, was reported to be \$1.696. The adjustments heretofore

Anthracite costs.—The inquiry into the costs of mining anthracite coal, which followed that for bituminous, covered costs for the various sizes of white-ash anthracite, red ash, and Lykens Valley coals for the six months' period, December, 1917, to May, 1918, inclusive. The anthracite field covers a smaller district, is indeed itself a single district, and gave relatively few problems in the adjustment of reported costs to a price-fixing basis.¹ But the spread in anthracite prices of the varying sizes, which for the chosen period ranged from \$5.244 for nut to \$2.074 for barley coal, made vital the question of the percentage of sizes produced at the different collieries. The percentage of prepared coal reported from different collieries, moreover, varied from over 80 per cent to below 30 per cent for fresh-mined coal, and the spread in prices for the various sizes had to be predicated upon some percentage to allow for variations.²

described raised this reported cost to \$1.706, a very strong indorsement of the honesty of the reports made by the operators.

The average "bulk line" was fixed at \$1.902, or 19.6 cents above the average adjusted cost. This represents the margin required to assure the mining of the necessary coal, as compared with the average cost, which, of course, involves the mining of only coal up to or below the average cost; in other words, half the available output.

The weighted average of all prices fixed is \$2.162 per ton and the average margin above the "bulk line" is 26 cents, representing all the above mentioned charges and all profit for the higher cost necessary mines; the margin above the average weighted cost for the whole country is 45.6 cents per ton, which, compared with profits in other businesses, certainly does not show any signs of profiteering in the coal business as a whole. The prices fixed are also sufficient, on the basis of the reported costs, to permit the mining of 98.4 per cent of all available coal, without loss.

¹ Mr. R. V. Norris, a member of the engineers' committee of the Fuel Administration and also of the price-fixing committee, has prepared an interesting paper on "Anthracite mining costs," which was printed in Bulletin No. 146, by the A. I. M. S., in February, 1919, by the Fuel Administration.

² Mr. Norris explains the method of making these adjustments as follows:
The logical method of adjustment is to calculate actual costs to costs as of the standard percentage of sizes, so that the margin between the adjusted costs and the average realization shall be the actual margin for each colliery between its actual costs and actual realization due to its particular percentage of sizes. As a basis for realization the actual percentage of sizes for fresh-mined coal for the 6-month period was adopted. This percentage is given below.

Size of coal.	Mesh, in inches.		Percentage of sizes.		
	Through, round.	Over, round.	Fresh mined.	Washery.	Fresh mined and washery.
Broken.....	4½	3½ - 3¼	6.8	0.4	6.2
Egg.....	3½ - 3¼	2½ - 2¼	14.6	1.2	13.5
Stove.....	2½ - 2¼	1½ - 1¼	19.6	2.3	18.2
Nut.....	1½ - 1¼		24.7	10.1	23.5
Pea.....			9.1	10.0	9.2
Buckwheat.....		¾ - ⅝	11.6	21.4	12.4
Rice.....	¾ - ⅝	⅝ - ⅜	3.2	14.9	4.2
Barley.....	⅝ - ⅜	⅜ - ⅞	4.9	27.5	6.8
Boiler.....	⅝ - ⅜	⅜ - ⅞	3.9	8.8	4.3
Screenings.....	⅝ - ⅜		1.6	3.4	1.7

For adjustment as a base for fixing a spread of prices the percentages used were taken at even figures, prepared, 65 per cent; pea, 9 per cent; buckwheat, 12 per cent; and smaller, 14 per cent.

The adjustment finally arrived at after long study was tested on actual reports from collieries having percentages that varied from over 80 per cent to under 30 per cent pre-

The engineers' committee, when it came finally to overhaul the earlier prices that had been fixed for the three important grades of anthracite coal, made charts to show the reported and adjusted costs for white ash, red ash, and Lykens Valley coal.¹ They found, after

pared coal and was found to be correct within a maximum variation of less than 1½ per cent. It was as follows:

For each 1 per cent variation.	Above standard per cent deduction.	Below standard per cent addition.
Prepared.....	1.20	1.20
Pea.....	.85	.85
Buckwheat.....	.75	.75
Smaller.....	.50	.50

As examples of the working of this adjustment with prices assumed at about the average for the 6 months and taking mines well away from average percentage of sizes.

Size.	Base per cent sizes.	Base price.	Realiza-tion.	Mine A per cent sizes.	Correc-tion per cent.	Actual realiza-tion.	Mine B per cent sizes.	Correc-tion per cent.	Reall-ization.
Prepared.....	65	\$5.10	\$5.315	73.1	-9.72	\$3.730	55.1	+11.880	\$2.810
Pea.....	9	3.70	.333	6.4	+2.21	.237	15.3	- 5.355	.566
Buckwheat.....	12	3.20	.384	10.4	+1.20	.333	13.7	- 1.275	.438
Smaller.....	14	2.20	.308	10.1	+1.95	.222	15.9	- .950	.350
Total.....	100		4.340	100.0	-4.36	4.522	100.0	+ 4.30	4.164

Assumed cost for each mine.....	\$4.000	\$4.000
Actual margin.....	.522	.164
Standard realization.....	4.340	4.340
Calculated cost as of standard per cent sizes—		
Mine A—\$4×0.9564 per cent.....	3.826	4.172
Mine B—\$4×104.30 per cent.....	.....	.....
Calculated margin.....	.514	.168

The correction for mine A is then 4.36 per cent and the adjusted cost \$3.826, showing 31.4 cents margin on the \$4.34 standard realization against 52.2 cents actual margin. Similarly for mine B, the correction is 4.30 per cent, giving an adjusted cost of \$4.172 and a margin of 16.8 cents, as compared with the actual margin of 16.4 cents. Thus the adjusted costs on the chart bear a true relation to the realization received from a scale of prices for the various sizes based on the standard or average percentage of sizes adopted as a base, regardless of the actual percentage of sizes produced by each operation, and prices can be fixed from the chart line of adjusted costs which will result in giving each mine its intended margin. The correction, of course, is an allocation based on realization from the different sizes and could be made more accurately by taking into account each size produced, but at the cost of more time than was available for the work. With a material variation in price, different factors of correction should be calculated.

¹ See anthracite chart in section on "The determination of a fixed price."

making weighted averages, the following average and bulk-line costs for standard fresh-mined white ash anthracite:

Description.	Costs, averages returned.	Costs, adjusted.	Cost, 90 per cent. bulk line.
Excluding washery coal:			
All operations, each colliery separate.....	\$3.85	\$3.91	\$4.80
All company operations, each colliery separate.....	3.71	3.79	4.65
All independent operations, each colliery separate.....	4.37	4.36	4.97
All operations, each company operating 2 or more collieries consolidated.	3.85	3.91	4.38
Including washery coal.			
All operations, each company operating 2 or more collieries consolidated.	3.57	3.77	4.34

A differential of 75 cents per ton, as had been made by the President on August 23, 1917, was made for pea size and above (equivalent to 52.95 cents per ton for all sizes) for the independent operators over certain companies with railroad affiliation, known as the "companies." It is of interest, in connection with the above table of average and bulk-line costs, to study the prices received for white-ash anthracite as prepared by the engineers' committee.¹

It is noteworthy that, despite the elaborate anthracite cost analyses later made by the engineers' committee, the prices of anthracite coal were left substantially as fixed by the President save for two labor increases and the early reduction in the price of pea coal. The tables following make possible a comparison of anthracite prices as origi-

¹The prices received by the companies and independents have not been separately averaged, as were the costs, but calculating on the differential and assuming the percentages the same for companies and independents, which is only approximately the case, the selling price of fresh mined coal would average for companies \$4.287 and for independents \$4.817. Margins over reported costs of companies would be 58 cents and for independents 45 cents, with a general average margin for all fresh mined coal of 56 cents and for all coal including washery of 71 cents per ton, and under "bulk-line" costs fresh mined companies, 36 cents; independents, 15 cents; total, 39 cents, including washeries consolidated sheets total of 7.5 cents.

These margins include all expenditures for Federal income and excess-profits taxes, selling expenses, interest charges, expenditures for improvements, and developments to increase output, excess of capital expenditures over normal cost, and all profit on the investment of about \$8 per ton annual output.

Size.	Fresh mined coal.		Bank coal.		Total, including banks.	
	Per cent.	Average price.	Per cent.	Average price.	Per cent.	Average price.
Broken.....	6.8	\$4.889	0.4	\$4.416	6.2	\$4.886
Egg.....	14.6	5.028	1.2	4.815	13.5	5.027
Stove.....	19.6	5.161	2.3	5.060	18.2	5.160
Nut.....	24.7	5.244	10.1	5.246	23.5	5.244
Pea.....	9.1	3.687	10.0	3.696	9.2	3.694
Total and weighted average prepared and pea.....	74.8	4.959	24.0	4.544	70.6	4.947
Buckwheat.....	11.6	3.342	21.4	3.213	12.4	3.324
Rice.....	3.2	2.482	14.9	2.452	4.2	2.473
Barley.....	4.9	2.231	27.5	1.767	6.8	2.074
Boiler.....	3.9	2.341	8.8	2.123	4.3	2.304
Screenings.....	1.6	2.202	3.4	1.555	1.7	2.162
Total and weighted average small sizes.....	25.2	2.795	76.0	2.339	29.4	2.697
Grand total.....	100.0	4.414	100.0	2.868	100.0	4.285

nally fixed by the President and as they stood after the signing of the armistice.¹

PRICES FIXED BY THE PRESIDENT AUG. 23, 1917.

	White ash.		Red ash.		Lykens Valley.	
	Company.	Independ-ent.	Company.	Independ-ent.	Company.	Independ-ent.
Broken.....	\$4.55	\$5.30	\$4.75	\$5.50	\$5.00	\$5.75
Egg.....	4.45	5.20	4.65	5.40	4.90	5.65
Stove.....	4.70	5.45	4.90	5.65	5.20	6.05
Chestnut.....	4.80	5.55	4.90	5.65	5.30	6.05
Pea.....	4.00	4.75	4.10	4.85	4.35	5.10

FIXED PRICES, DEC. 31, 1918.

	White ash.		Red ash.		Lykens Valley.	
	Company.	Independ-ent.	Company.	Independ-ent.	Company.	Independ-ent.
Broken.....	\$5.95	\$6.70	\$6.15	\$6.90	\$6.40	\$7.15
Egg.....	5.85	6.60	6.05	6.80	6.30	7.05
Stove.....	6.10	6.85	6.30	7.05	6.70	7.45
Chestnut.....	6.20	6.95	6.30	7.05	6.70	7.45
Pea.....	4.80	5.55	4.90	5.75	5.15	5.90

The average costs of producing anthracite coal, as they were reported for the six-month period from December, 1917, to May, 1918, including the increase of December 1, 1917, but not that of November 1, 1918, follows: ²

AVERAGE ANTHRACITE COST, DECEMBER, 1917, TO MAY, 1918.

	Cost per ton.		
	Fresh mined coal, 35,256,540 tons.	Washery operations, 3,431,916 tons.	Total, including washeries, 38,688,456 tons.
Labor.....	\$2.593	\$0.087	\$2.423
Supplies.....	.616	.280	.584
Transportation, mine to breaker.....	.004	.007	.004
Royalty, current.....	.153	.102	.145
Royalty, advance.....	.002		.002
Depletion.....	.099	.077	.097
Amortization of cost of leasehold.....	.014	.024	.016
Depreciation.....	.001	.000	.000
Pro rata suspended cost of stripping.....	.023		.021
Contract stripping and loading.....	.009		.009
Taxes, local.....	.054	.034	.052
Insurance, current.....	.016	.014	.016
Insurance, liability.....	.058	.018	.055
Officers' salaries and expenses.....	.030	.049	.029
Office salaries and expenses.....	.048	.024	.045
Legal expenses.....	.005	.003	.005
Miscellaneous.....	.026	.023	.026
Total.....	3.841	1.378	3.522
Increase over May to November, 1917.....	.764	.365	.719

¹Mr. R. V. Norris, backed by the engineers' committee, concludes from these tables that "the selling price of anthracite has been increased but 30.5 per cent over the prewar price, while the cost of production has gone up 52 per cent, the difference having been absorbed by the operators."

²Fuel Bulletin No. 146.

The final realization for all companies and all sizes, including washery coal and both of the labor increases, was calculated to average \$5.13 per ton, while the bulk line, as shown previously, plus the November, 1918, labor increase, amounts to \$5.32.¹

(6) THE CONTROL OVER COKE.²

It has already been noted that the market prices of coke, so closely allied with iron and steel, rose to unprecedented heights during the summer of 1917. The wholesale price for Connellsville coke, furnace, prompt shipment, f. o. b. ovens, which just a year before had stood at \$2.75, shot to \$13.42 in August, 1917. The War Industries Board, by reason of its concern in the stabilization of iron and steel prices, had rescued coke quotations from a runaway market by fixing them definitely at a flat rate of \$6 per ton on September 24, 1917. It is of interest that the Fuel Administration later confirmed this price and upon it as a basis figured numerous differentials and special prices for various districts.³ The Fuel Administrator on November 9, 1917, without any specific mention of previous price fixing, established maximum prices to be effective the following day. These maximum prices for coke made in ovens without by-product recovery east of the Mississippi River were:

Blast furnace	\$6.00
Foundry coke, 72-hour selected.....	7.00
Crushed coke, over 1-inch size.....	7.30

These prices were made applicable per ton of 2,000 pounds f. o. b. cars at the plant where coke was manufactured. It was declared that the maximum prices for various grades of beehive coke made in districts other than these should bear the same ratio to the established price of the coal from which the coke was made as the average contract prices of the same grades of coke had to the average contract prices of coal during the years 1912 and 1913.

It is estimated that 10 per cent only of the total output of coke is sold on the open market, and there is no satisfactory measure from market quotations, therefore, of the relative point at which coke prices were fixed or the effect of price fixing upon the general market level as realized for the bulk of sales. There can be no question that the September price fixing had a tremendous influence in the pulling of the market price from its historic peak in August and holding it at a lower level thereafter. But if one would measure the effects of price fixing upon the remaining 90 per cent of the total

¹ R. V. Norris.

² See also chapter on "Iron and steel," under the War Industries Board controls.

³ See "General Orders, Regulations, and Rulings" of the Fuel Administration, Ch. VI, Title I, sec. 1.

output, he must compare the fixed price with previous contract prices. There have been calculated below so-called realization prices for the United States from the spot quotations and the average annual realization reported by the Geological Survey.¹ The comparison has been facilitated by turning the weighted realization prices into relative prices, by letting the base price from July 1, 1913, to June 30, 1914, equal 100.

The accompanying table of "spot" prices presents a marked contrast to the realization price table.² Price fixing beyond doubt scaled the market quotations from unprecedented heights for the smaller percentage of coke sales. The effect of price fixing upon the great bulk of sales by contract is, however, not so clear. The realization prices, indeed, went far beyond their 1917 peak several months after control had set in, and not during the whole of 1918 did they come down from that height.

WEIGHTED REALIZATION PRICES FOR ALL CONNELLSVILLE COKE.

ACTUAL PRICES PER NET TON.

Month.	1913	1914	1915	1916	1917	1918
January.....	\$2.51	\$2.12	\$2.03	\$2.65	\$4.87	\$6.03
February.....	2.38	2.12	2.03	2.68	4.88	6.03
March.....	2.37	2.12	2.03	2.69	4.88	6.03
April.....	2.34	2.12	2.03	2.61	4.77	6.03
May.....	2.31	2.11	2.03	2.60	4.79	6.03
June.....	2.34	2.10	2.04	2.62	4.97	6.03
July.....	2.37	2.10	2.05	2.64	5.04	6.03
August.....	2.38	2.10	2.03	2.64	5.09	6.03
September.....	2.36	2.09	2.05	2.65	4.96	6.03
October.....	2.33	2.08	2.09	2.78	4.69	6.03
November.....	2.31	2.08	2.12	2.93	4.69	6.03
December.....	2.30	2.07	2.17	3.03	4.69	6.03
Year.....	2.36	2.10	2.06	2.71	4.86	6.03

RELATIVE PRICES.

January.....	113	95	91	119	218	270
February.....	107	95	91	120	219	270
March.....	106	95	91	121	219	270
April.....	105	95	91	117	214	270
May.....	105	95	91	117	215	270
June.....	105	94	91	117	223	270
July.....	106	94	92	118	226	270
August.....	107	94	91	118	228	270
September.....	106	94	92	119	222	270
October.....	104	93	94	126	210	270
November.....	104	93	95	131	210	270
December.....	103	93	97	136	210	270
Year.....	106	94	92	122	218	270

¹ These realization prices, figured by Mr. C. E. Lesher, were found in the same manner as those for bituminous coal, except that the assumption was made that 10 per cent of the total output was sold on the market and 90 per cent under contract, and that the coke year was from January to December. The prices for furnace and foundry coke were averaged in accordance with the relative production of each in 1916, as reported to the Geological Survey by the producers.

² Both of these series are presented with more detail in "The Prices of Coal and Coke," by C. E. Lesher, W. I. B. Bulletin No. 35.

WEIGHTED "SPOT" PRICES OF ALL CONNELLSVILLE COKE.
ACTUAL PRICES PER NET TON.

Month.	1913	1914	1915	1916	1917	1918
January.....	\$2.90	\$1.87	\$1.52	\$2.96	\$9.51	\$4.08
February.....	2.54	1.87	1.52	3.38	9.66	6.08
March.....	2.42	1.92	1.52	3.48	9.66	6.08
April.....	2.18	1.88	1.52	2.44	7.43	6.08
May.....	2.15	1.79	1.52	2.33	7.83	6.08
June.....	2.13	1.77	1.57	2.51	11.26	6.08
July.....	2.46	1.76	1.65	2.76	12.76	6.08
August.....	2.51	1.72	1.52	2.82	13.59	6.08
September.....	2.31	1.66	1.62	2.95	11.14	6.08
October.....	2.10	1.61	2.04	4.85	6.00	6.08
November.....	1.84	1.53	2.30	6.91	6.08	6.08
December.....	1.77	1.51	2.65	8.39	6.08	6.08
Year.....	2.36	1.74	1.75	3.82	9.24	6.08

RELATIVE PRICES.

January.....	194	93	76	147	474	300
February.....	127	93	76	168	481	300
March.....	121	96	76	173	481	300
April.....	109	94	76	122	370	300
May.....	107	89	76	116	390	300
June.....	106	88	78	125	361	300
July.....	123	88	82	137	636	300
August.....	125	86	76	140	677	300
September.....	115	83	81	147	555	300
October.....	105	80	102	242	299	300
November.....	92	76	115	344	300	300
December.....	88	75	132	418	300	300
Year.....	118	87	87	190	400	300

(7) THE CONTROL OVER CHARCOAL.

The Fuel Administrator did not bring charcoal under formal price control until the middle of 1918.¹ Maximum prices were then fixed for charcoal f. o. b. cars at the point of shipment as follows:

	Cents.
Lump in bulk, per bushel (20 pounds).....	20
Lump in bags, per bushel (20 pounds).....	22
Screening in bags, per bushel (20 pounds).....	20

A reasonable charge, subject to the approval of the Fuel Administration, was allowed for handling and delivery where wagon deliveries were made from the producer to the purchaser.

(8) CONTROL OVER FUEL WOOD.

It is of interest that the Fuel Administration on October 29, 1918, authorized the Federal fuel administrators in the various States to establish such reasonable regulations as to the length of rail shipments of fuel wood cut within the State as they deemed necessary, and to stipulate the conditions of such shipments.

¹ July 9.

(9) THE CONTROL OVER PETROLEUM.

THE EARLY WAR SITUATION.

The tremendous demands for petroleum and its products during the past decade brought the industry by 1915 to face a consumption demand which surpassed the annual domestic output. Indeed, for more than a year prior to the declaration of war by the United States we had been drawing upon reserve stocks and imports from Mexico in order to supply our needs.¹ The war, of course, both through the acceleration of industries and the large military consumption, increased the demand for petroleum products of all kinds. Moreover, the acute coal shortage and the transportation congestion of the winter of 1917-18 encouraged the substitution of fuel oil for other kinds of fuel. The demand for fuel oil, as might be expected, increased until a shortage developed and prices soared. Fuel oil, which had previously been of secondary importance in the refining of petroleum, took the lead among the various products.

THE REGULATION OF PRICES.

The rise in the price of fuel oil was naturally reflected in the price of crude petroleum, and market quotations for the latter soon reached a level 100 per cent higher than the prewar average.² (See chart on p. 195.) It soon became apparent, both to the petroleum industry and the various governmental agencies, that something would have to be done toward stabilizing prices. Several suggestions were made relative to governmental intervention. The opinion of the trade was that the "price of petroleum products be fixed in the same way

¹ A review of the petroleum situation in the United States immediately prior to our entrance into the war is presented at length in Bulletin 36 of the present series, "Prices of Petroleum and Its Products," by Joseph E. Pogue, assisted by Isador Lubin. (W. I. B. Price Bulletin No. 36.)

² The following data present the course of the fuel oil and crude petroleum prices for the 6 years 1913 to 1918. Fuel oil spot quotations are not as representative of typical conditions as might be desirable, since the greater part of our supply is sold under contract. Tables of actual and relative realizations at a centrally located refinery, therefore, are appended in order that the reader may obtain a truer picture of the price situation.

ACTUAL REALIZED PRICES OF FUEL OIL JANUARY, 1913-DECEMBER, 1918.

[Per barrel.]

Month.	1913	1914	1915	1916	1917	1918
January.....	\$2.15	\$1.90	\$1.55	\$3.26	\$3.74	\$4.76
February.....	2.15	1.90	1.50	3.26	3.98	4.76
March.....	2.15	1.90	1.50	3.26	3.98	4.76
April.....	2.15	1.67	1.50	3.02	3.98	5.36
May.....	2.15	1.55	1.50	2.79	3.45	5.36
June.....	1.67	1.55	1.60	2.79	3.45	5.36
July.....	1.67	1.55	1.50	2.79	3.45	5.36
August.....	1.67	1.67	1.96	2.30	3.93	5.36
September.....	1.67	1.67	2.20	2.30	3.93	5.36
October.....	1.67	1.55	2.31	2.30	3.98	5.36
November.....	1.67	1.55	2.79	2.30	3.98	5.36
December.....	1.90	1.55	2.26	2.26	3.93	5.36

that iron and steel prices were fixed.”¹ It was not until August 18, however, that any definite action was taken in the matter, and on that date the plan (1) to stabilize the price paid for crude oil; (2) to maintain the continued and uninterrupted flow of crude oil in its present channels in so far as is practicable and just to the interests involved through the voluntary action and cooperation of the industry itself was inaugurated. This system of voluntary price fixing was nothing more than a voluntary agreement made by the trade whereby the prevailing market prices were to be continued without increase, and premiums were to be limited to certain fixed maxima.² The amount allowed for premiums varied from 10 cents per barrel of crude oil in the Appalachian districts to \$1.50 for certain parts of the Mid-Continent.

Footnote continued from page 191.

RELATIVE REALIZED PRICES OF FUEL OIL JANUARY, 1913-DECEMBER, 1918.

Month.	1913	1914	1915	1916	1917	1918
January.....	125	110	90	189	217	276
February.....	125	110	87	189	231	276
March.....	125	110	87	189	231	276
April.....	125	97	87	175	231	311
May.....	125	90	87	162	200	311
June.....	97	90	87	162	200	311
July.....	97	90	87	162	200	311
August.....	97	97	114	133	228	311
September.....	97	97	127	133	228	311
October.....	97	90	134	133	228	311
November.....	97	90	162	133	228	311
December.....	110	90	189	189	228	311

¹ The solution of the problems relating to petroleum was centered in the hands of the Oil Division of the Fuel Administration, which was established on Jan. 10, 1918, with Mr. M. L. Requa as general director. From the very beginning he placed considerable emphasis upon the price situation. Through his efforts the problem of petroleum prices was settled with a minimum of administrative interference. On Apr. 25, he approached the War Industries Board with the request that action be taken along the lines adopted for other essential commodities. The attitude of the petroleum industry toward this matter is made evident in the following extract from Mr. Requa's letter to Mr. Baruch:

“The petroleum war service committee, as a result of an extended conference with me on the subject of prices, have requested that prices of petroleum products be fixed in the same way that steel prices were fixed. If this be done, it will greatly simplify the matter of allocation of purchases.”

No action, however, was taken by the War Industries Board at this time. Again on July 15, the price-fixing committee was asked to fix the price of fuel oil, especially for Navy purchases, but this request also was followed by no action, since it was the opinion of the committee that adequate power to regulate prices of fuels lay in the hands of the Fuel Administration.

² Many small refiners are in the habit of paying certain premiums above posted market prices of crude petroleum in order that they may obtain sufficient supplies. Mr. Requa in approving the plan referred to these premiums and their relation to the price of petroleum products as follows:

“I want first to say that it is the understanding of this department that the premiums mentioned are to be maximum and are not to be paid unless absolutely necessary; are not to be used in justification for a demand for increased prices for refined products and that prices above existing posted prices, if justified at all, can only be so upon the score of existing trade practices making such premiums necessary to permit the small purchaser to secure his crude. If Government control and direction finally follow as a national need, premiums, I believe, will be entirely wiped out, as present posted prices are in themselves ample to stimulate and encourage production.”

Moreover, the industry was given to understand that should the occasion arise for any readjustments in the prices of petroleum products, adequate proof of such necessity would have to be furnished. Mr. Requa goes on to say:

“Broadly speaking, it is the hope of the Fuel Administration Oil Division that further advances in finished products will not be necessary; but should it prove that

The administration of this agreement was left entirely in the hands of the trade and through a series of local and national committees all points of issue were settled. Appeal to Washington was made "only as the last resort after all means of settlement had been exhausted."¹ The established prices were to affect all contracts existing on August 8 which had been entered into after May 17, 1918, and were to be in force until November 1, 1918, when they were further extended to December 16.²

THE LICENSING OF THE PETROLEUM INDUSTRY.

On January 31, 1918, a presidential proclamation required the licensing of "all firms, corporations, and associations engaged in the business of both manufacturing and distributing fuel oil" whose gross sales were more than 100,000 barrels per year. The purpose of such licensing appears to have been the regulation of the distribution of fuel oil in order that various essential consumers such as the Railroad Administration, the Shipping Board, and the war agencies might have sufficient supplies to meet their needs.³ A system of delivery priorities was inaugurated and distributors were forbidden to deliver fuel oil to any customer in any class before fulfilling the demands of customers in those classes which had prior rating.

In September the need for still further control of the petroleum industry led to the licensing of virtually all members of the trade with the exception of those retailers whose sales were below \$100,000. Whereas formerly only dealers and producers of fuel oil were under direct control, now all importers, manufacturers, distributors, marketers, and transporters of petroleum and its products were placed under license. Licensees were not allowed to make unjust profits or commissions and were limited even in the storage rates they could charge. Resales and the cornering of supplies were forbidden. Regulations as to methods of manufacturing gasoline were also put in force, so that the Army and Navy might have sufficient supplies of the type necessary for their operations; and certain refiners were compelled to produce a specified proportion of their gasoline in accordance with Army and Navy specifications.

this is not the case it means that such proof must be carefully, completely, and accurately made and presented to this department before any acquiescence or approval can be expected.

¹ See letter of Mr. Requa to Mr. A. C. Bedford of the national petroleum war service committee Aug. 8, 1918.

² The prices fixed in the respective fields were: Pennsylvania, \$4; Illinois, \$2.32; Mid-Continent, \$2.25; Gulf, \$1.35; California, \$1.26. The price for the Gulf fields was later increased by Mr. Requa to \$1.80 and a 10-cent per barrel increase was allowed for Illinois. An increase was also allowed in the late summer for oils mined in north Louisiana.

³ Indeed, the order of the Fuel Administrator establishing the rules governing licensees engaged in the distribution of fuel oil specifically states:

"These rules and regulations are promulgated * * * for the purpose of assuring an adequate supply and equitable distribution of fuel oil for the purposes vitally essential to the national security and to the successful prosecution of the war."

THE GASOLINE EMERGENCY.

Even licensing, however, did not meet all the necessary requirements of the emergency. Every effort had been made toward the production and marketing of more crude oil, so that refiners who had been compelled constantly to increase their plants might be assured adequate supplies. Yet the extended use of motor trucks, the demands of our submarine chasers, and our air fleet continued to draw more and more upon our resources. Our gasoline reserves were being depleted. Talk of gasoline allocation for essential use became rife, and conservation data were distributed far and wide. Finally, beginning September 1, “gasless Sunday” was inaugurated and operators of gasoline-consuming vehicles east of the Mississippi River were “requested” to refrain from using gasoline on Sundays. In addition the refinery output of gasoline was restricted as far as possible to essential uses, and producers under the license regulations were forbidden to make deliveries of gasoline to any customer until all orders for export to the United States Army or Navy or to the Allies had been delivered.¹

CONTROL AND ITS EFFECT UPON PRICES.

The signing of the armistice, followed by the cancellation of Government contracts, put an almost immediate end to the activities of the Oil Division of the Fuel Administration on December 7. On this date many of the license restrictions were removed and nine days later the price agreement of the previous summer terminated. On May 15, 1919, all restrictions upon the petroleum industry were removed.

The leveling effect of the price agreement of the summer of 1918 is prominently brought out by the contrast between the price tendencies of both crude petroleum and its most important products, gasoline and fuel oil, during the period of its operation and before that time. Still more significant, however, is the comparison between the price level of the direct petroleum products and such by-products as paraffin and petrolatum.

¹ See Fuel Administration order governing manufacturers of kerosene and gasoline, Oct. 30, 1918.

The above regulations and “requests” were no doubt instrumental in alleviating a situation which had become exceedingly acute, as is evidenced by a comparison of supplies on hand at the end of the several months of the early autumn in 1917 and 1918. Stocks were consistently smaller in 1918 than in the preceding year in spite of increased production, conservation measures, and the direction of distribution.

STOCKS OF GASOLINE HELD IN THE UNITED STATES.

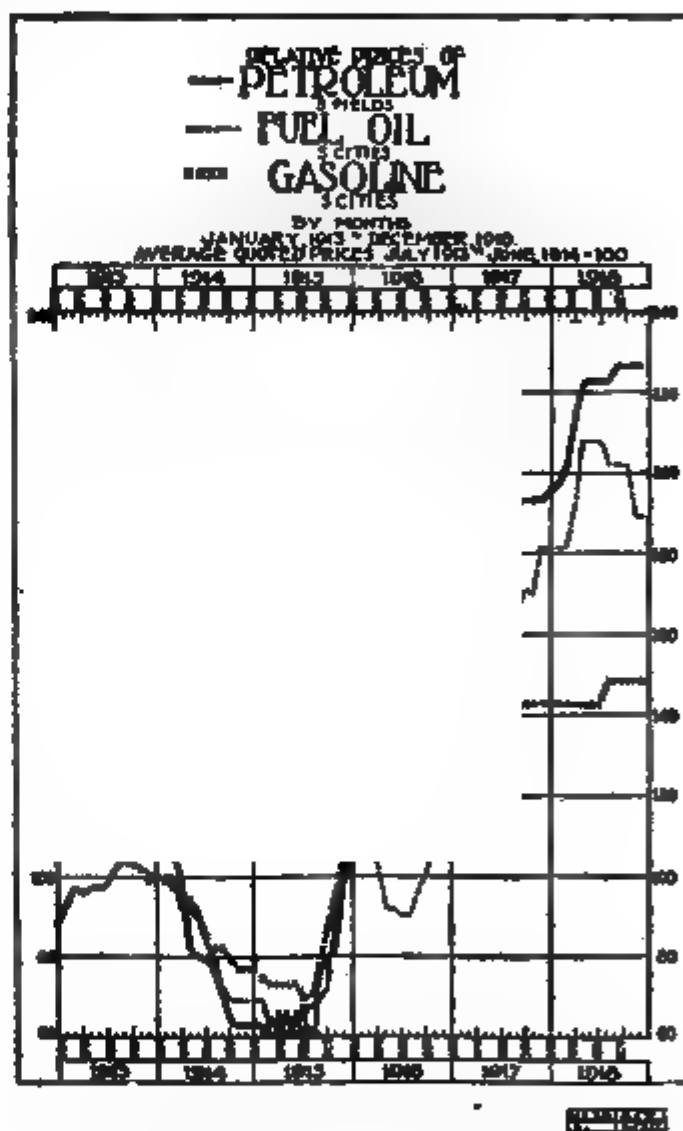
Date.	1917	1918	Date.	1917	1918
	<i>Gallons.</i>	<i>Gallons.</i>		<i>Gallons.</i>	<i>Gallons.</i>
July 31.....	345,199,195	349,928,604	Sept. 30.....	287,758,562	269,772,723
Aug. 31.....	298,548,609	285,446,538	Oct. 31.....	320,203,770	250,328,329

4. THE WAR INDUSTRIES BOARD.

The War Industries Board was the industrial pivot about which war-time controls turned. From an idea, and then a committee within the Council of National Defense, it grew quickly into the most powerful arm of the President for converting the industries into war uses. It was the meeting point of the war machine and industry. It at once cleared requirements for the Government war agencies, allocated to the trade the output of commodities required immediately or in the future, assigned priority of production and delivery to war materials, curtailed non-essential production, conserved wasteful production by various restrictions, and controlled prices. The ramifications of these controls, within the Government and out, make them relate intimately to prices. The price control exercised by the board proper, or that exercised by the price-fixing committee, can not be discussed without first understanding the relations of these other controls over industry.

(1) THE DEVELOPMENT OF A CONTROL OVER WAR INDUSTRIES.

The growth of a fuller control over industries was a more gradual thing than would seem from an examination simply of the finished monument. The Government, though educated in the doings of Europe for the three years previous, had not appreciated that it too might enter the combat, and had not yet prepared itself when war came. The Cabinet, high officials of the Government, and lower officials, went into all-day and evening conferences, inside the Government and



Relative prices.—Petroleum, 5 fields; Fuel oil, 5 cities; Gasoline, 5 cities.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

out, to learn their problem and solve it. There was no conviction, aside from the need for soldiers and ammunition, that pressed more insistently upon the Government than the need for some form of control over industry. The gradual evolution of the machinery of war-time industrial control was one of the greatest of the nonmilitary developments within the Government. A full story of the rise of the War Industries Board, which was the center of that control, falls into three separate parts: (1) The early work of the general munitions board, the committee on supplies, and the committee on raw materials, minerals and metals within the Council of National Defense; (2) the creation of the War Industries Board within the Council of National Defense on July 28, 1917; (3) and, finally, the creation of the War Industries Board as an independent organization under the Overman Act on May 28, 1918.

THE EARLY WORK OF THE COUNCIL OF NATIONAL DEFENSE.

A comprehension of how the War Industries Board came into its control over industry can not be had without tracing its earlier growth from a mere committee of the Council of National Defense to an independent board. The Council of National Defense was conceived, and later authorized under the Army appropriation bill of August 29, 1916, simply as a peace-time body to work broadly upon preparedness for war. The act itself declared it to be established "for the coordination of industries and resources for the national security and welfare," and made it the duty of the Council of National Defense "to supervise and direct investigations and make recommendations to the President and the heads of executive departments as to the location of railroads with reference to the frontier of the United States so as to render possible expeditious concentration of troops and supplies to points of defense; the coordination of military, industrial, and commercial purposes in the location of extensive highways and branch lines of railroad; the utilization of waterways; the mobilization of military and naval resources for defense; the increase of domestic production of articles and materials essential to the support of armies and of the people during the interruption of foreign commerce; the development of seagoing transportation; data as to amounts, location, method and means of production, and availability of military supplies; the giving of information to producers and manufacturers as to the class of supplies needed by the military and other services of the Government, the requirements relating thereto, and the creation of relations which will render possible in time of need the immediate concentration and utilization of the resources of the Nation."

The Council of National Defense (consisting of the Secretary of War, the Secretary of the Navy, the Secretary of the Interior, the Secretary of Agriculture, the Secretary of Commerce, and the Secretary of Labor) and its advisory commission¹ had only the above general powers, as a basis in law. for the structure of control which it later built.²

Our determination to enter upon war caught the country, except for the paper-organized Council of National Defense, quite without a Government organism to assume control over its industries. The need for an organized industrial fabric, moreover, was then our paramount one. The Allies needed our munitions, metals, foods, and manufactures more immediately than they needed our men. The Council of National Defense, thus long before authorized as a peacetime body, was formally organized on March 3, 1917, and was seized upon as the best available organ for the control of industry. The council, which represented virtually the President's Cabinet, with the Secretary of War acting as chairman, and the advisory commission met several times each week during the spring after our entrance into war and planned how best to meet the war emergencies. A surprising number of the more important war agencies grew out of their early plans and their early committees. The Council of National Defense made the initial survey of the food problem which developed into the formation of a Food Administration; it created the Aircraft Production Board which later became separate; it created an important committee on coal production which later went into the Fuel Administration; it established the commercial economy board; and the munitions standards board. But the three most important committees which grew up under the newly organized Council of National Defense, and those which relate peculiarly to later price control, were the general munitions board, the committee on supplies, and the committee on raw materials, minerals and metals.

The general munitions board.—The general munitions board, created on March 31, 1917, and going for several days under the name of the purchasing commission, began three days after we entered the war to coordinate purchases for the Army and Navy, to assist them in the procurement of raw materials, and to assign to war orders priorities as between the Government departments and between the Government and industry. Since the board was destined ultimately

¹The Council of National Defense, by authority of the statute, appointed an advisory commission of 7 members who administered the work of the council, as follows: Daniel Willard (chairman), transportation and communications; Howard E. Coffin, munitions and manufacturing; Julius Rosenwald, supplies; Bernard M. Baruch, raw materials, minerals, and metals; Hollis Godfrey, engineering and education; Samuel Gompers, labor; Franklin Martin, medicine and surgery.

²See section 2 of H. R. 17498, known as the Army appropriation act.

to grow into the War Industries Board, it is of peculiar interest to note the resolution by the Council of National Defense creating the general munitions board:

Such committee shall have no authority at this time to issue purchase orders, make contracts or bind the Government in its purchases; all these things to be done, as at present, by the respective departments. The chairman of the committee, however, shall have authority to require, when necessary, that certain (conflicting) purchases be not made until the same, with a full statement of the facts, have been submitted to the Secretaries of the War and Navy.¹

The general munitions board, moreover, at its initial meeting conceived as its purpose—

to assume the prompt equipping and arming with the least possible disadjustment of normal industrial conditions, of whatever forces may be called into the service of the country. The immediate efforts of the board will be directed on lines calculated to coordinate the making of purchases by the Army and Navy; to assist in the acquirement of raw materials and of manufacturing facilities; and to establish the precedence of orders between the departments of War and of the Navy and between the military and industrial needs of the country.²

A perusal of the original minutes of the general munitions board shows that the board, despite its assigned narrower task, became peculiarly concerned with prices and their informal control. The board attacked, and virtually eliminated, competitive bidding by the Army and Navy for the same materials. It developed policies for the procurement of commodities required by war agents. It recognized from the outset that the Government, if it procured the estimated requirements, was confronted with the necessity of cutting down some and directing much of the industrial output, clearing all Government requirements over one table, and assigning priority of production and delivery to war materials. It helped to develop sources for rifles and other small arms, machine guns, ordnance, ammunition, gun forgings, carriages, limbers, caissons, forge wagons, military vehicles, steel helmets, armor-piercing shells, surgical supplies, optical glass and gauges, tools, and dies. Especial progress was made toward the production of the estimated requirements (gun forgings, small arms, ammunition, lumber for Army vehicles, and machine guns) of the Army and Navy. The real beginnings of the price-control problem came with the purchase of these materials, when the general munitions board advised the military departments how to determine prices and itself considered whether prices should be made a flat rate to the Government, or based upon cost plus a percentage of profit.

¹ The general munitions board began work on Apr. 9, 1917, under the chairmanship of Frank A. Scott, and by June 30 was composed of 17 representatives from the War and Navy Departments and 6 other civilians.

² See minutes of general munitions board for Apr. 9, 1917.

No doubt the first important recognition, or grant of authority, which enabled the general munitions board to influence prices was that given on April 17, 1917, by the Secretary of War, then chairman of the Council of National Defense:

The general munitions board, having been appointed by the Council of National Defense, and having been called upon to perform, among other duties, that of determining what are fair and just prices to be paid by the Government for munitions and related supplies, I authorize the general munitions board to act on questions involving the determination of fair and just prices for munitions and related supplies, when called to do so by a Department head.¹

This edict gave the munitions board, in so far as it could win cooperation from any Government department, a free hand to determine upon and recommend "fair and just" prices for war materials.

An inquiry, at a very early date, was made by the general munitions board into the more technical questions of how to determine "fair and just" prices and what understanding was to be made with the trade, pending that determination for purchases needed immediately. The board after a time, concluded that where a flat rate could not be agreed upon a cost plus percentage basis should be followed.² It frequently happened that certain purchases were required so promptly that deliveries were delayed awaiting the determination of a fair price. The board, in order to hasten deliveries, was authorized in such cases to assure the manufacturers a price of actual cost plus 10 per cent of profit.³ That general practice was often followed, in a modified form, in the later price fixing.

¹ Minutes of general munitions board for Apr. 17, 1917.

² The general munitions board, after hearing the report of its price committee, adopted the following policy on Apr. 25, 1917:

That whenever experience or public or competitive quotations make it possible for the department to be assured of the reasonableness of the price, a straight price method is to be preferred.

In cases where a flat price can not be agreed upon, it is suggested that a cost plus percentage basis be followed; the method of figuring cost to be the one laid down in the present law providing for the payment of a munitions tax.

In cases where it is desirable to use the cost plus percentage basis, but where the Government and contractor are already aware of a fair average cost for producing the article the method might be cost plus percentage, providing that if the cost falls below the average amount prescribed, the contractor shall receive half of the saving. If the cost passes above the amount prescribed, half the excess will be deducted from the contractor's percentage of profit.

³ The minutes of the general munitions board for May 5, 1917, show the following resolution made then a policy by the board:

"Resolved, That where prices of material, machinery, manufactured articles, etc., named by the manufacturers are in excess of those recently paid for similar material, and prompt action is necessary to prevent delay in actual work of manufacture, the orders for such material may be placed immediately with such manufacturers and the actual prices to be paid settled after further investigation, provided that the manufacturer is assured of a price of actual cost plus 10 per cent after submitting complete and satisfactory data as to items controlling increase in cost and an affidavit as to accuracy of data."

Another important step toward the final plan of price control was the authorization given by the munitions board for its subcommittee (on prices) to "fix specific prices" in cases of emergency. The writing of that informal power into its minute book, though without any authority in statute, was a leap peculiarly significant as paving the way to future control. This resolution of the general munitions board, adopted May 1, 1917, says:

That all questions regarding prices be laid before a general meeting of the board, except in cases where specific power is delegated by the board. However, in case of emergency the chairman shall be, and he is hereby, empowered to appoint a committee to fix specific prices.

The more or less formal records of the general munitions board, quite apart from the many unwritten tales that are passed from ear to ear, show clearly that the beginnings of price control date back not only before the creation of the price-fixing committee but before the creation of the War Industries Board. The general munitions board, created by the Council of National Defense on March 31, 1917, for the purpose of coordinating war purchases, of its own initiative concerned itself with prices. It, without the authority of a statute, studied how prices ought to be controlled and, more and more, assumed an informal control over them. The policies then elaborated comprehend to a surprising degree the essentials of the later price control.

The committee on supplies.—The Council of National Defense, two months before we declared war, created a committee on supplies to advise with the purchasing officers of the War and Navy Departments and to help them coordinate their requirements for clothing, equipment, and subsistence.

This committee, one of the first seriously to give its attention to the question of stabilizing prices, was the first to ask the Secretary of War to abandon the peace-time Army and Navy practice of advertising for bids. It believed that advertisements for enormous quantities of staples would disturb industry and stimulate the inflation of prices. This change effected, the Government was enabled to go over the heads of the middlemen directly to the manufacturers for its purchases. In the past, when these middlemen heard of proposed Government purchases, they commonly secured options in advance upon such supplies and then quoted them to the Government at increased prices.

The committee on supplies organized various subcommittees from every trade (notably cotton goods, woolen goods, knit goods, shoes, leather equipment, and canned goods), which later were made into commodity sections and assisted materially in the turning of manufacturing plants into Government uses.

The committee, in a word, concerned itself primarily with commodities difficult to secure because of the excessive requirements of the Government, shortage of raw material involved in their manufacture, or of the competition for civilian uses. It opened a way to later price control, in a sense, by its experience at securing options, the "pegging" of prices by various informal methods, the allocation of requirements to the industry, and by the reduction of competition between Government departments for the same goods.¹

The committee on raw materials, minerals, and metals.—The committee on raw materials, minerals, and metals under the direction of Bernard M. Baruch, which was the nucleus about which the commodity sections of the War Industries Board later grew, was created to survey the supply of raw materials available for our own and allied uses. The European war needs, prior to our entrance into war, had exhausted many of our surplus stocks and our prewar business contracts had tied up immense quantities of the remaining stocks. Those limitations, coupled with the reduction in shipping space for imports, made the problem before the Baruch committee one of the most pressing of that time.

It soon became apparent to the committee on raw materials, minerals, and metals, after several initial inquiries,² that the satisfaction of all Government and allied commodity needs would require a thorough-going organization of industry. Mr. Baruch, himself a man of business viewpoint, put supreme confidence in widely respected business men and organized a series of coöperative committees under their leadership. It was largely through these early contacts with the trade that he, and his committee, were able to strike agreements for the placement of Government orders at lower than market prices. The committee gave marked impetus to the later work by the prompt organization of commodity committees for the alcohol, aluminum, anthracite and bituminous coal, asbestos, magnesia, roofing, brass, cement, chemicals, copper, lead, lumber, mica, nickel, oil, rubber, steel, and steel products, and zinc industries.³ The chief services, perhaps, of these commodity committees as a working part of the raw materials committee, were their help in providing trade information relative to supplies, their technical advice pertaining to the procurement of requirements, and their ability to hasten deliveries.

¹ These data are taken from the first annual report of the Council of National Defense for the year ended June 30, 1917.

² The committee studied the situation relative to the more important import articles such as nitrates, pyrites, rubber, mica, tin, platinum, and palm oil.

³ Advisory committees were also appointed to cover large numbers of the various special constituent fields, as, for example, in respect to the following products: Pig iron, iron ore, tin plate, sheet steel, wire rope, malleable castings, ferroalloys, tubular products, cold-rolled and cold-drawn steel, pig iron, wire products, and scrap iron and steel.

The foregoing beginnings of industrial control form a background of all control over prices later exercised by the War Industries Board. The committee on raw materials early recognized the need for stabilization of the market and for the purchase of Government requirements at reasonable prices. The committee itself, for example, as early as March, 1917, arranged informally for the purchase of 45,000,000 pounds of copper at 16½ cents at a time when the prevailing market price was 35 cents. Soon afterwards a trade agreement was made for the purchase of 500,000 tons of steel at a price over one-third below the market price; and large purchases of zinc and lead were also bought at like reductions. The committee, through the cooperative subcommittee on lumber, "pegged" lumber prices below the prevailing market and effected an estimated saving to the Government of \$10,000,000.¹ These and other similar agreements all, it should be emphasized, were of a highly informal character. But, as such perhaps, they served the more to impress the Government and the trade with a confidence in prices jointly made. That belief, whether for better or worse, played a leading rôle in the subsequent system of price control.

THE WAR INDUSTRIES BOARD CREATED UNDER THE COUNCIL ON JULY 28, 1917.

The Council of National Defense, recognizing shortly the need for a broader control over industry, created the War Industries Board on July 28, 1917. The creation of the new board, approved by the President, emphasized simply the urgency for more control than the general munitions board, the committee on supplies, and the committee on raw materials, minerals and metals had been exercising. It, therefore, was empowered to exercise control over more industries than had the general munitions board and to take over bodily the whole of the committee on supplies, and that on raw materials with the numerous commodity committees under it.² In these three early committees of the Council of National Defense the newly created War Industries Board had its nucleus.

The official announcement of the creation of the War Industries Board declared that it was to act "as a clearing house for the war-industry needs of the Government, determine the most effective ways of meeting them, and the best means and methods of increasing production, including the creation or extension of industries demanded by the emergency, the sequence and relative urgency of the

¹ These data are set forth in the first annual report of the Council of National Defense, issued for the fiscal year ended June 30, 1917.

² Mr. Frank A. Scott, who had been chairman of the general munitions board of the council, was retained as chairman of the new board. The chairmanship, later in the fall, was given to Mr. Daniel Willard.

needs of the different Government services, and consider price factors." The board, under this definition of powers, after taking jurisdiction over the work of the various advisory committees on raw materials and supplies, within a few months re-formed those committees into what later became commodity sections.¹

The appointment of Chairman Baruch.—A noteworthy reorganization of the internal work of the War Industries Board, and one which went far toward placing it upon its final basis, occurred when the President asked Mr. Bernard M. Baruch to become its chairman on March 4, 1918. The President had by then become impressed with the need for even a more far-reaching control over industry than the law specifically provided or than had been yet exercised by the Council of National Defense or the 7-month-old War Industries Board. He, therefore, upon the appointment of Mr. Baruch, redefined the functions of the board and read into them a number of sweeping war powers. This broad survey of powers to be exercised made Mr. Baruch "the general eye of all supply departments in the field of industry," responsible to anticipate prospective requirements of the Government and to turn the full capacity of the country to their production. It made his board responsible to create new facilities and to find new sources of supply; to advise the Government pur-

¹ There follows a statement in full of the official outline of the powers and organizations of the War Industries Board as created on July 28, 1917:

The board will act as a clearing house for the war-industry needs of the Government, determine the most effective ways of meeting them, and the best means and methods of increasing production, including the creation or extension of industries demanded by the emergency, the sequence and relative urgency of the needs of the different Government services, and consider price factors and, in the first instance, the industrial and labor aspects of problems involved and the general questions affecting the purchase of commodities.

Of this board Mr. Baruch will give his attention particularly to raw materials, Mr. Brookings to finished products, and Mr. Lovett to matters of priority. These three members, in association with Mr. Hoover so far as foodstuffs are involved, will constitute a commission to arrange purchases in accordance with the general policies formulated and approved.

The Council of National Defense and the advisory commission will continue unchanged and will discharge the duties imposed upon them by law. The committees heretofore created immediately subordinate to the Council of National Defense, namely, labor, transportation and communication, shipping, medicine and surgery, women's defense work, cooperation with State councils, research and inventions, engineering and education, commercial economy, administration and statistics, and inland transportation, will continue their activities under the direction and control of the council. Those whose work is related to the duties of the War Industries Board will cooperate with it. The subcommittees advising on particular industries and materials, both raw and finished, heretofore created, will also continue in existence and be available to furnish assistance to the War Industries Board. The purpose of this action is to expedite the work of the Government, to furnish needed assistance to the departments engaged in making war purchases, to devolve clearly and definitely the important tasks indicated upon representatives of the Government not interested in commercial and industrial activities with which they will be called upon to deal, and to make clear that there is total disassociation of the industrial committees from the actual arrangement of purchases on behalf of the Government. It will lodge responsibility for effective action as definitely as is possible under existing law. It does not minimize or dispense with the splendid service which representatives of industry and labor have so unselfishly placed at the disposal of the Government.

chasing agents relative to prices that ought to be paid; and to determine priorities in production and delivery. It is of especial interest that in this letter the President asked Mr. Baruch, as chairman, to be governed in his determination of prices by a committee sitting with him, and consisting of members of the board charged with the study of raw materials and manufactured products, the labor members of the board, the chairman of the Federal Trade Commission, the chairman of the Tariff Commission, and the Fuel Administrator.¹

¹ There follows a copy in full of the letter written to Mr. Bernard M. Baruch from the White House on Mar. 4, 1918, and redefining the work to be done by the War Industries Board under his chairmanship:

MY DEAR MR. BARUCH: I am writing to ask if you will not accept appointment as chairman of the War Industries Board, and I am going to take the liberty at the same time of outlining the functions, the constitution, and action of the board as I think they should now be established.

The functions of the board should be:

(1) The creation of new facilities and the disclosing, if necessary the opening up, of new or additional sources of supply;

(2) The conversion of existing facilities, where necessary, to new uses;

(3) The studious conservation of resources and facilities by scientific, commercial, and industrial economies;

(4) Advice to the several purchasing agencies of the Government with regard to the prices to be paid;

(5) The determination, wherever necessary, of priorities of production and of delivery and of the proportions of any given agencies when the supply of that article is insufficient, either temporarily or permanently;

(6) The making of purchases for the Allies.

The board should be constituted as at present and should retain as far as necessary and so far as consistent with the character and purposes of the reorganization, its present advisory agencies, but the ultimate decision of all questions, except the determination of prices, should rest always with the chairman, the other members acting in a cooperative and advisory capacity. The further organization of advice I will indicate below.

In the determination of priorities of production, when it is not possible to have the full supply of any article that is needed produced at once, the chairman should be assisted, and so far as practicable guided, by the present priorities organization or its equivalent.

In the determination of priorities of delivery, when they must be determined, he should be assisted when necessary, in addition to the present advisory priorities organization, by the advice and cooperation of a committee constituted for the purpose and consisting of official representatives of the Food Administration, the Fuel Administration, the Railway Administration, the Shipping Board, and the War Trade Board, in order that when a priority of delivery has been determined there may be common, consistent, and concerted action to carry it into effect.

In the determination of prices the chairman should be governed by the advice of a committee consisting, besides himself, of the members of the board immediately charged with the study of raw materials and of manufactured products, of the labor member of the board, or the chairman of the Federal Trade Commission, the chairman of the Tariff Commission, and the Fuel Administrator.

The chairman should be constantly and systematically informed of all contracts, purchases, and deliveries, in order that he may have always before him a schematized analysis of the progress of business in the several supply divisions of the Government in all departments.

The duties of the chairman:

(1) To act for the joint and several benefit of all supply departments of the Government;

(2) To let alone what is being successfully done and interfere as little as possible with the present normal processes of purchases and delivery in the several departments;

(3) To guide and assist wherever the need for guidance or assistance may be re-

**THE WAR INDUSTRIES BOARD MADE INDEPENDENT UNDER THE OVERMAN ACT ON
MAY 28, 1918.**

A still further independence was given the War Industries Board on May 28, 1918, when, by the authority of the Overman Act, the President separated the board from the Council of National Defense. There were, it appears, no additional powers over industry granted to the board in law or in proclamation by virtue of its new independent status. It was set apart from the Council of National Defense, and given its independence, by an Executive order. But that order did not itself, nor did any accompanying proclamation, set up new functions or powers. The order, indeed, specifically referred to the previous letter written to Mr. Baruch on March 4, 1918, and declared that the functions, duties, and powers of the War Industries Board, as outlined there, "shall be and hereby are continued in full force and effect."

(2) THE POWERS AND POLICIES OF THE WAR INDUSTRIES BOARD.

A search after the powers and policies of the War Industries Board leads to such a dearth of material that it is curious how industry was put under control so easily. That board, though charged with the control of all industry save food and fuel, had a more doubtful statutory basis for pushing rigid control policies than any other war board. It had fewer specific powers in law than either of the boards responsible for controlling simply the food and fuel phases of industry respectively. But, despite all, the War Industries Board gradually assumed the functions of coordinating Government purchases and of maintaining a widespread and effective control over industry. It is of interest to trace the basis in law for all of this war-time control, the policy of control which Mr. Baruch sponsored, the scheme of organization he administered, and finally, the relation which the work of the board itself bore to the regulation of prices.

vealed; for example, in the allocation of contracts, in obtaining access to materials in any way preempted, or in the disclosure of sources of supply;

(4) To determine what is to be done when there is any competitive or other conflict of interest between departments in the matter of supplies; for example, when there is not a sufficient immediate supply for all and there must be a decision as to priority of need or delivery, or when there is competition for the same sources of manufacture or supply, or when contracts have not been placed in such a way as to get advantage of the full productive capacity of the country;

(5) To see that contracts and deliveries are followed up where such assistance as is indicated under (3) and (4) above has proved necessary;

(6) To anticipate the prospective needs of the several supply departments of the Government and their feasible adjustment to the industry of the country as far in advance as possible, in order that as definite an outlook and opportunity for planning as possible may be afforded the business men of the country.

In brief, he should act as the general eye of all supply departments in the field of industry.

Cordially and sincerely yours,

(Signed)

WOODROW WILSON.

ITS BASIS IN LAW.

It is not difficult to find all of the basic powers that were given to, and taken by, the War Industries Board to authorize its controls. The mandates of the War Industries Board, with scarcely a single exception, were accepted throughout the Nation, as authoritative arrangements for the general good, without question as to the authority upon which they were issued. The war-time spirit of the country and its industry was, in the main, weapon enough to enforce any regulation necessary for the common weal. But, withal, the compulsory forces behind the war-industry controls exercised by the board were not altogether lacking. They came, directly or indirectly, from the Army appropriation act, which was made law on August 29, 1916 and authorized the creation of a Council of National Defense; the President's well known letter of March 4, 1918; the Overman Act; and other grants of lesser importance.¹

The Army appropriation act, of which the pertinent section was analyzed earlier in the chapter, authorized the creation of a Council of National Defense.² It was given power to investigate and recommend to the President and heads of the executive departments in matters relating to the location of railroads to help concentrate troops and supplies most expeditiously; the coordination of military, industrial, and commercial purposes in the location of highways; the utilization of waterways; the increase of domestic production of articles and materials essential to the support of armies and of the people during the interruption of foreign commerce; the development of sea-going transportation; data as to amounts, location,

¹ A brief digest is here given of the various statutes from which the War Industries Board claimed power to enforce its mandates either directly or indirectly.

The Council of National Defense act (39 Stat., 619) authorized the President to take possession and assume control of systems of transportation. The naval emergency fund act (39 Stat., 1168) authorized the requisition of raw materials for the Navy and, in so far as they pertained to aircraft, for the Army. The emergency shipping fund act (40 Stat., 182) authorized requisition of materials for ships; the food control act (40 Stat., 276) granted requisitory powers over foods, fuels, and other supplies necessary to the support of the Army, the maintenance of the Navy, or any other public use connected with the common defense, over storage facilities for supplies, over plants for the production of such supplies, over plants for production or merchandising of coal and coke, and over distilled spirits. A power of compulsory order with penalties for refusal was granted in the national defense act (39 Stat., 166). These, with various powers of regulation and license granted in the food and fuel acts, the espionage and trading-with-the-enemy act (40 Stat., 225; and 40 Stat., 411), and the power of regulation of prices granted in the former act, and of priorities in transportation under the priority in transportation act of Aug. 10, 1917—lodged in various agencies of the Government such power to vitalize governmental preferences in particular fields as to render a complete system of such preferences practicable. While these powers were not given to the War Industries Board in specific statutory terms, by close cooperation between the agencies to which they were granted, and by the transfer of power to the War Industries Board under the Overman Act, the whole legislative mechanism was amply sufficient to have enforced the execution of all directions that were given.

² That section, quoted earlier in the chapter, is Section 2, H. R. 17498.

methods, and means of the production of military supplies; informing the producers and manufacturers what classes of supplies are required by the Government; and, from the standpoint of the study at hand, most important of all, "the creation of relations which will render possible in time of need the immediate concentration and utilization of the resources of the nation." It was primarily under this last general grant of power that the Council of National Defense found statutory authority for setting up, as a part of it, a so-called War Industries Board.¹

The Army appropriation act, authorizing the parent council, gave it power specifically to do no more than "supervise and direct investigations and make recommendations to the President and the heads of executive departments." The War Industries Board, as a creature of the council, had no leg in law more firm to stand upon than that early fragmentary power given during peace time.

More specific far, if not more basic, than the clauses of the Army appropriation act were the functions which the President interpreted under it in his letter of March 4, 1918. That letter, written by authority of the above act and his general war powers, was the immediate and most definite of all grants of power made to the War Industries Board. In it, after appointing a new chairman of the board, he redefined its functions to include the creation of new facilities and disclosing new sources of supply; conversion of existing facilities to new uses; conservation of resources and facilities by scientific, commercial and industrial economies; advice to the Government purchasing agents with regard to prices to be paid; the determination of priorities in production and delivery where necessary; and the making of purchases for the Allies. Then apart from the above powers and duties assigned by him to the board as a whole, the President made it the duty of the chairman to act for the joint and several benefit of all supply departments of the Government; to guide and assist in allocation of contracts, in obtaining access to materials, the finding of new supplies or whatever need may be revealed; to determine how to eliminate conflict of interest between departments in the matter of supplies; to see that contracts and deliveries are followed up; to anticipate the requirements of the Government and to meet them.²

The act creating the council, while not defining the methods to be followed in planning the "concentration and utilization of the resources of the Nation," had placed, on the other hand, no restric-

¹ The Council of National Defense was given authority by the act itself "to organize subordinate bodies for its assistance in special investigations, either by the employment of experts or by the creation of committees of specially qualified persons to serve without compensation, but to direct the investigations of experts so employed."

² Letter of the President to Bernard M. Baruch of Mar. 4, 1918.

tions upon the council within its general grant of power. The President's letter, though more specific and sweeping in its enumeration of powers, did clamp upon the War Industries Board as such two distinct restrictions in power. The President specifically asked Mr. Baruch, as chairman of the War Industries Board, "to let alone what is being successfully done and interfere as little as possible with the present normal process of purchases and delivery in the several departments." The other, and for this inquiry more pertinent, restriction upon the War Industries Board and its chairman was the limitation placed upon its right to fix prices. The President left the final decision of all questions relative to its control over industry, except the determination of prices, with its chairman. This specific exception was striking, and gave rise to the creation by the President of a price-fixing committee.

The passage of the Overman Act on May 20, 1918,¹ gave a new face, if not a new content, to the powers of the War Industries Board. One of the purposes of the act was the "better utilization of resources and industries," but under it the President was given no new powers other than those pertaining to a redistribution of functions, duties, and powers already conferred by law. It authorized him, as he did on May 28, 1918, to break the War Industries Board apart from the Council of National Defense and set it up as a body quite independent and charged to perform the duties outlined in his earlier letter. That separation itself gave a considerable show of added authority, which for war-time purposes was about as effective as additional statutory powers.

The basis in law of the creation and powers of the War Industries Board, then, was not as firm or definite as that of the Food Administration and Fuel Administration. The latter were the creatures of specific legislative action by the Congress after we had entered the war² and were given very definite war-time controls to administer with ample power and with the enforcement of penalties. The War Industries Board was the creature of a peace-time statute, adopted as the nearest authority at hand for a makeshift but immediate organization of the board, and later filled with new purpose and inspiration by a letter from the President. The war-time spirit of the country was an immeasurable power upon which to draw for the enforcement of regulations. It is much more evident that the War Industries Board sadly lacked a full grant of legislative power than that it suffered much from the lack.

¹ See S. 3771 for Overman Act in full.

² Created by the food and fuel act of Aug. 20, 1917.

THE POLICY OF MR. BARUCH.

The paucity of power given by law to the War Industries Board and, more especially, the ill-defined character of that power, aroused a lively interest in the policies of Mr. Bernard M. Baruch. He, it might be supposed, had at his disposal a wider freedom to control after his own fashion than had any other industry-controlling chairman at Washington. If the Congress had not created his board by special enactment, neither had it defined his course for him or tied his hands. Mr. Baruch, with the war on, was not in need of more far-reaching powers unless he contemplated somewhat radical regulation. He did not, in point of fact, complain of lack of power or go to the Congress for more. It might from these points be inferred, as was a fact, that Mr. Baruch by necessity and by choice ordinarily did not announce policies of control until each problem arose and was attacked. There is little more to say of his policies than that he went before the country with no hard and fast policies of control; he delegated the making and administering of those policies to commodity chiefs, known as "dollar a year" men, and chosen from the trade; and that he maintained a well-planned organization of contacts with all of the Government and the industry.

The problem put to the War Industries Board was too involved, difficult, and big to state in a word or comprehend at once how best to attack it. The Board became virtually responsible for turning the whole of industry, save the food and fuel industries, into war uses. But, except where there appeared a war requirement to fill, it pursued religiously a policy of noninterference. The task of fulfilling Government and allied orders made the War Industries Board deal, in the main, with the big-business end of industry, much as the task of conserving foods made the Food Administration deal so largely with the smaller dealers and consumers. The regulation of the steel industry, which was said to be controlled by seventeen men who could be gathered into one room at Washington, required a quite different method from that applicable to the regulation of wheat. Mr. Baruch, himself strictly a business man by experience and point of view, was in a strategic position to fraternize with the trade and give it a more tolerant attitude toward Government interference. He, as they knew, had been in Washington a full year when the President asked him to take the chairmanship of the War Industries Board on March 4, 1918. During that time, furthermore, he had mixed freely with them and convinced them that he was bent upon no revolution of industry and would ask nothing beyond what was vitally needed in war time.

There seemed to Mr. Baruch no occasion for wide publicity or propaganda among the millions of small dealers and consumers, and the majority of contacts made by the board with the country were made informally around conference tables with the leaders of industry. He preferred frankly, as necessity to control an additional industry arose, to meet that industry separately and make individual agreements which seemed at the time the most expedient. Mr. Baruch, therefore, did not during the whole war formulate and advertise any general or dominating principles of industrial control.

As said above, it was the policy of Mr. Baruch to delegate the making and administration of detailed policies to his "dollar-a-year" men, whom he had called to the board from the trade. These commodity chiefs, who were presidents and managers of large firms during peace time, brought the Government and the industry quickly together. All of them, through the cooperation of hundreds of war-service committees authorized to speak for the various trades, maintained an intimate and frequent contact with production and price conditions of each important raw material and finished product. They formed the most ready and most effective of all the links between the Government and industry. The most distinguished of all the policies of Mr. Baruch was found in the organization of contacts. He believed thoroughly in, and did develop, a wide scheme of contacts within the Government and out. One of the first things which Mr. Baruch set out to do, when he came into the chairmanship of the board, was to perfect and establish lines of personal contact with every war agent of the Government and every organized branch of war industry under his control.

THE ORGANIZATION OF THE BOARD.

There is little danger of emphasizing too often the value to the war-industry control, realized through the organization scheme of the War Industries Board. That board was made at every angle to synchronize Government requirements and supply. The functions of gathering requirements, clearing purchases, allocating orders to the trade, making procurements, determining priorities in production and delivery, curtailing less or nonessential production, instituting conservation programs, and controlling prices were conceived and assigned to distinct divisions of the War Industries Board. Each commodity section, headed by a chief from the board proper, was composed of members from all other Government purchasing agencies interested in that particular commodity. The chief, through his war-service committees, was also as closely affiliated in contact with the trade. Each commodity section, then, to a smaller degree, was the center of information pertaining to the demand and supply of its

particular commodity as was the Board for the whole of industry.¹ These smaller sections were organized in larger divisions subordinate to the board proper consisting of Chairman Bernard M. Baruch, a vice chairman who also represented the allied purchasing commission, a representative of the Army, a representative of the Navy, the priorities commissioner, the chairman of the price-fixing committee, a representative of labor, the director of steel, the commissioner of finished products, and a technical advisor.

THE RELATION OF THE BOARD TO PRICE FIXING.

Scarcely an important action was taken by the War Industries Board which did not affect prices, and account should be taken of

¹ A clearer idea of the important organization scheme, set up by the War Industries Board, to unite Government requirements and industry production, as it stood at the signing of the armistice, follows:

Organization scheme of the War Industries Board.—Divisions: Building materials division, chemical division, conservation division, division of planning and statistics, explosives division, facilities division, finished products division, hide, leather, and leather goods division, labor division, price fixing committee, priorities division, pulp and paper division, purchasing commission for the Allies, requirements division, steel division, textile division. Sections: Acids and heavy chemicals section (chemical division), agricultural implements, animal and hand-drawn vehicles, and wood products section, alkali and chlorine section (chemical division), automotive products section, belting section (hide, leather, and leather goods division), boot and shoe section (hide, leather, and leather goods division), brass section, bureau of warehouse distribution (steel division), chain section, chemical glass and stoneware section (chemical division), clearance office, coal-gas products section (chemical division), cotton and cotton linters section (textile division), cotton goods section (textile division), crane section, creosote section (chemicals division), division of business administration, domestic skins and hides section (hide, leather, and leather goods division), electrical and power equipment section, electrodes and abrasives section (chemical division), electric wire and cable section, emergency construction committee, ethyl alcohol section (chemical division), felt section (textile division), ferro-alloys section (chemical division), fiber board and container section (pulp and paper division), fire prevention section, flax products section (textile division), forgings, guns, small arms, and small-arms ammunition section, gloves and leather clothing section (hide, leather, and leather goods division), gold and silver section (chemical division), hardware and hand tool section, harness and personal equipment section (hide, leather, and leather goods division), hides and skins section (hide, leather, and leather goods division), inland traffic section, iron and steel scrap section (steel division), jute, hemp, and cordage section, knit goods section (textile division), labor section (priorities division), legal section, lumber section, machine tool section, manufacturing section (pulp and paper division), medical section, mica section (chemical division), military optical glass and instrument section, miscellaneous chemicals section (chemical division), miscellaneous commodities section, news section—committee on public information, newspaper section (pulp and paper division), nitrates section (chemical division), nonferrous metals section, nonwar construction section, paint and pigment section (chemical division), paper economies section (pulp and paper division), periodical section (pulp and paper division), platinum section (chemical division), power section, projectile steel rails, alloy steel, and cold-drawn steel section (steel division), permit section (steel division), pig iron section (steel division), price section (division of planning and statistics), railway equipment and supply section, refractories section (chemical division), resources and conversion section, rubber section (textile division), sheepskin and glove leather section (hide, leather, and leather goods division), silk section (textile division), sole and belting leather section (hide, leather, and leather goods division), special advisory committee on plants and munitions, statistics section (steel division), steel products section (steel division), stored materials section, sulphur-pyrites section (chemical division), synthetic dye and intermediate section (chemical division), tanning materials and vegetable dye section (chemical division), technical and consulting section (chemical division), tin section, tobacco section, upper, harness, bag, and strap leather section (hide, leather, and leather goods division), wood chemicals section (chemical division), woolens section (textile division), wool section, domestic (textile division), wool section, foreign textile division).

all that the board did if it is hoped to tell in full the tale of war-time control over prices.

But, strictly speaking, the War Industries Board was not a price-fixing agency and had no independent hand in the fixing of prices. The price-fixing committee, while popularly thought a creature of the War Industries Board and under its directions, was really created by the President as an organization independent of the board.

It will be recalled that the President, in his letter of March 4, not only failed to give the War Industries Board powers to control prices, but specifically limited it in that power. He gave the chairman a free hand in all other delegated controls, "except the determination of prices," and declared that—

In the determination of prices the chairman should be governed by the advice of a committee consisting, besides himself, of the members of the Board immediately charged with the study of raw materials and of manufactured products, of the labor member of the board, of the chairman of the Federal Trade Commission, the chairman of the Tariff Commission, and the Fuel Administrator.¹

It seems doubtful, in view of these limitations, whether any considerable formal power to fix prices was given to the War Industries Board of itself. The commodity chiefs, again and again, however, came to informal agreements with the trade and in reality often determined what prices should be asked of the Government and the civilian trade. The board worked hand in glove with the price-fixing committee and, in a large way, was the administrative organ to which the committee looked for the enforcement of prices which it fixed.

(3) THE KINDS OF CONTROL EXERCISED.

Once the War Industries Board had learned the problem facing it, and saw that it must make itself the Government clearing house for war-time industrial needs, there was presented the necessity for organizing controls to that end. The departments came with war requirements, and left it to the War Industries Board to meet them as it would. No war board at Washington undertook such a multiplicity of controls, for no other covered a field so wide. It was responsible virtually for the whole of industry save food and fuel, and had to administer it by the use of many quite distinct forms of control. Any person who served with the War Industries Board instinctively thinks of its work under the technical terms,—“requirements,” “clearances,” “priorities,” “allocations,” “curtailments,” “conservation,” “prices,” and others of lesser importance. Each of these special kinds of control affected prices and, indeed, might be called phases of price control. No study of the problem touching Govern-

¹ The price-fixing committee, with Mr. Robert S. Brookings as chairman, was appointed by the President and had its first meeting Mar. 14, 1918.

ment control over prices could claim comprehensiveness without some analysis of these phases.

REQUIREMENTS.

There were few problems which Mr. Baruch at the outset saw more clearly than the need for a mechanism to receive and classify Government requirements. He impressed that fact, through his chiefs, upon the Government and on April 2, 1918, announced the creation of a new requirements division. It was, in a sense, the funnel through which the Government sent its requests for commodities to the War Industries Board preparatory to later clearance and allocation. It was the organ which Mr. Baruch set up in response to the President's letter asking him to keep "as far in advance as possible" a watch of the "respective needs" of the Government and Allies and saying that he "should be constantly and scientifically informed of all contracts, purchases, and deliveries in order that he may have always before him a schematized analysis of the progress of business in the several divisions of the Government in all departments." The new requirements division, as conceived by the President and by his newly appointed chairman, was to be the focus of all the war-industry controls over the production and distribution of raw materials or finished products required by the Government or her Allies. There passed through it during the war literally thousands of requirements.¹

The requirements division, because designed to bring to one table all Government requirements, was organized to include representatives from all agencies which made considerable purchases for war purposes in the Government and out (Army, Navy, Emergency Fleet, Marine Corps, Railroad Administration, Housing Corporation of the Department of Labor, Purchasing Agency of the Panama Canal, Allied Purchasing Commission, Red Cross, Y. M. C. A., Knights of Columbus, and the Commission on Training Camp Activities). The Food Administration and Fuel Administration, too, were given opportunity to attend the meetings when they desired projects that involved materials, supplies, facilities, electrical power, fuel or transportation affecting the industries. The requirements division, though loosely organized enough to permit changes and the entrance of new representatives from time to time, consisted of its chairman and the more important divisional heads of the War Industries

¹The records of the requirements division show that the consecutive numbers of separate requirements totaled five thousand odd, which included all of the Government and part of the allied requirements handled. But in addition, there were hundreds of allied requirements not so numbered. The bulk of all these requirements did not start coming in until the fall of 1918, when, sometimes, several hundred came in a single morning.

Board, assembled in conference with the supply heads for the Government and the Allies.¹

It took, in point of fact, some months to impress the Government and the Allies with the necessity for a strict and constant estimate of future requirements. That shortsightedness gave the War Industries Board one of its most difficult problems. A vast number of the shortages had come simply from failure to look ahead for needs. The new requirements division, therefore, devoted itself to the task of gathering future requirements and left the immediate needs to the clearance committee. The work of the division, as the plan behind it gradually took root, grew tremendously in importance and in effectiveness.

The routine by which all requirements were received at a central point and distributed to the commodity chiefs is indicative of the policy behind the whole scheme. The various Government and allied representatives, who throughout Washington on the day previous had made new requirement estimates, brought those requirements to the War Industries Board each morning. They were there read aloud in the requirements division and, as the representatives chose, discussed. The discussion did not, of course, turn upon whether the future requirement should be allowed or disallowed. That determination was left to the time when these requirements should ripen into clearances. It turned rather upon whether there was a shortage and, if so, how the requirement should be met. The requirements, after the meeting, were sent forthwith to the commodity chiefs of the War Industries Board.

These commodity sections, each headed by a chief representing the War Industries Board, included representatives from each supply department of the Government interested in the commodity required. It was the business of the commodity chief, with the advice of his section members, to find ways to meet the requirements and, later on, to allocate them. The department which originally submitted the requirement was expected to keep account of it through a representative in the commodity section to which the requirement had been referred. At the last, the commodity chiefs were asked to fill out a blank for the requirements division in receipt of each requirement, stating in detail whether and how the industry could meet the

¹ The requirements division, as originally organized, was made to include Mr. Alex. Legge (chairman), the executive secretary of the War Industries Board, the priorities commissioner, the chief of finished products division, the chief of the iron, steel, and steel products division, the chief of the chemicals and explosives division, the chief of the nonferrous metals section, one or more representatives of the War Department, one or more representatives of the Navy Department, a representative of the Marine Corps, one or more representatives of the Emergency Fleet Corporation, and a representative of the Railroad Administration. Later, Mr. James Inglis and finally Mr. W. E. Guylee was made secretary.

requirement. Each commodity chief was asked to consider market conditions pertinent to the requirements; recommend purchase plans to the several purchasing departments; and, if it seemed necessary to control an industry in whole or in part by allotments, to determine the allocation of materials, commodities, and facilities to the several Government departments, Allies, and to civilians.

CLEARANCES.

The War Industries Board, with all of its emphasis upon the need for anticipating and recording future Government requirements, had only perfected its mechanism to that end a short while before the armistice was declared. These so-called requirements, as time went on, each ripened into a clearance and in theory every clearance should have been anticipated in some previous requirement. A "requirement," as commonly termed, was a future requirement, and a "clearance" was an immediate requirement. The one in logic preceded the other. But, in point of practice, under the intense pressure of their other work the officials found it exceedingly difficult to estimate their requirements until the very hour when there came a pressing need for them. The beginnings of clearances, therefore, date back to the start of the war and they far exceed the estimated requirements which were sent to the requirements division prior to their being actually cleared.

The clearance committee.—The General Munitions Board at the beginning of the war saw the necessity for coordinating the purchase branches of the Government,¹ and created under it a clearance committee comprising a chairman, a secretary, and representatives from the General Staff, the separate purchase branches of the Army, the Navy, the Allied Purchasing Commission, the Marine Corps, and the important sections of the General Munitions Board.² This early committee attempted to bring together the purchasing of war materials, to adjust matters of priority between the various departments and to keep a watch over shortages of materials. One of the most important of the early functions, perhaps, was the meeting ground it afforded to the supply bureaus of the Army. In May, 1918, however, the Army centralized its own purchases in a newly created purchase and supply branch of the purchase, storage, and traffic division. There was then less occasion for the Army to send more than one representative to the clearance committee conferences.

¹ The Council of National Defense first asked the General Munitions Board to make clearances on Apr. 28, 1917.

² Mr. Frank A. Scott was made chairman of the clearance committee at its inception. When he resigned the chairmanship passed to Lieut. Col. C. C. Bolton, who held it until the reorganization of the committee, when Rear Admiral F. F. Fletcher was made chairman.

The clearance committee, by coordinating all supply purchases, eliminated in large measure competitive bidding by various branches of the Government for the same material. It took especial interest in watching prices and, where there appeared shortages of materials, issued clearance lists. But it became more and more difficult for the clearance committee, even as reorganized in May, to handle the volume of work before it.

The numbers of immediate requirements that needed clearance each morning grew into the hundreds and made utterly hopeless any more than a mere perfunctory reading of them at the clearance committee meetings. The enormous increases in Government purchases, though none the less demanding coordination or clearance, gave the committee more work than it could do either with care or expedition. That consideration, and the development of the commodity sections within the War Industries Board, contributed to another and final organization of the clearance work. The commodity sections, after a time, were made to include representatives from each of the Government purchasing agencies. Obviously, then, the logical disposal for the clearance committee to make of each immediate requirement was to clear it directly through the commodity chiefs. These reasons explain why the deliberative work became less and less important and the routine of distributing clearances more and more so. They explain why, in a word, the old clearance committee was abolished on July 24, 1918, and its work was delegated to a newly created clearance office within the requirements division.

The clearance office.—It was the business of the clearance office to receive all requests for clearances, record them, and distribute them promptly to the proper commodity sections. It had, furthermore, to urge action by the commodity sections and, after clearance, to inform every purchasing department of the Government of the prospective purchases of every other department. Throughout the war there were cleared, by the clearance committee and later by the clearance office, altogether 29,000 immediate requirements. Of that total, 80 per cent emanated from the War Department, 15 per cent from the Navy Department, and 5 per cent from the other departments. It is interesting and relevant to note that the War Industries Board granted about 95 per cent of all requests for clearance and that 5 per cent were refused by reasons of adjustment of war needs between ourselves and the Allies. The War Industries Board was, of course, the central point to which all prospective war purchases were brought for clearance. It, therefore, required that all Government departments report such purchases to its clearance office in so far as they appeared on a confidential so-called clearance or "shortage" list.

The clearance list.—No bureau of the Government had such a check upon shortage of supplies as had the War Industries Board through its clearance work. There was early made up as a working basis a clearance list, upon which were entered from time to time the specific articles of which there was shortage and for which clearance was required. The practice at the start was to list separate commodities as necessity demanded. The clearance office later, however, made the sweeping additions to the clearance list of—

all schedules of prospective purchases involving orders for any articles or commodities, to be placed in the congested district, which orders shall call for or involve the creation or use of additional fuel, power, or transportation facilities,

and

all schedules of prospective purchases involving the creation of new or additional facilities wherever placed and however created.

The clearance list, in point of fact, came at last to cover virtually the whole list of important war-making materials.¹

¹ There follows a copy of the clearance list (or "shortage list") as it stood at the signing of the armistice.

Clearance list.—Before negotiations are instituted clearance must be obtained on proposed purchases of articles or commodities in the four following general classifications:

1. All schedules of prospective purchases involving articles or commodities on the list given below, entitled "Clearance schedule."

2. All schedules of prospective purchases involving orders for any articles or commodities, to be placed in the congested district, which orders call for or involve the creation or use of additional fuel, power, or transportation facilities. The boundaries of the congested district will be defined from time to time by the Railroad Administration, Fuel Administration, and War Industries Board, and will be published by the latter. This congested district now is included between the Atlantic Ocean and a line drawn through Chesapeake Bay to Baltimore, north to Harrisburg, west to Altoona, northeast through Williamsport, Binghamton, and Schenectady to the Hudson River, and thence north to the northeastern boundary of the State of New York. The districts served by the electrical power companies of Canton, Baltimore, Massillon, Alliance, Niagara Falls, Pittsburgh, Connellsville, Wheeling, Youngstown, and Akron are also prohibited centers due to lack of power.

3. All schedules of prospective purchases involving the creation of new or additional facilities wherever placed and however created; that is, either direct or indirect Government business; and including all war building of any nature whatsoever.

4. The orders for production in Government plants do not require clearance so far as the actual order itself is concerned, though the material required for filling the order will require clearance if on the clearance list. At the time requirements are presented, statement must be made as to whether the Government department at interest is in a position to handle all or any part of the order within its own plants.

Clearance schedule.—Acids, agricultural implements, vehicles (not auto propelled), and wood products:

(a) Vehicles:

Army wagons.

Army carts, two-wheel.

Artillery wheels, spokes, and hubs.

Spare parts.

(b) Truck bodies.

(c) Wood products, meaning handles, boxes, containers, crates, propellers, etc.

(d) Agricultural tractors.

Automotive products, meaning:

(a) Motors, truck, tractor, aeroplane.

(b) Transmissions.

PRIORITIES.

Little control would, indeed, have been exercised over industry in this country had the War Industries Board simply gathered in,

Automotive products, meaning—Continued.

- (c) Axles.
- (d) Springs.
- (e) Forgings.
- (f) Tires, solid.
- (g) Rims, pressed on.
- (h) Motor-cycle rims.
- (i) Pneumatic tires.
- (j) Steel wheels.
- (k) Magnetos.
- (l) Spark plugs.
- (m) Valves.
- (n) Cam shafts, finished and rough.
- (o) Crank shafts, finished and rough.
- (p) Trucks.
- (q) Military tractors.
- (r) Motor cycles.
- (s) Trailers.
- (t) Storage batteries.
- (u) Ball and roller bearings.
- (v) Steel castings for motor cars.
- (w) Drive and link belt chains.
- (x) Radiators.
- (y) Babbitt-lined bearings.
- (z) Frames.
- (aa) Truck bodies for motor chassis.
- (bb) Sets of spare parts for automotive vehicles.

Brass and copper rods, tubing, and sheets.

Chains (all chains other than automotive drive and link belt).

Chemicals.

Cordage, hemps, and fibers, including—

- (a) Jute.
- (b) Manila.
- (c) Kapok mattresses, pillows, pads, and life garments.
- (d) Coir yarns.
- (e) Manila rope.
- (f) Sisal rope.
- (g) Cocoa mats and cocoa matting.
- (h) Linoleum.
- (i) Oakum.
- (j) Burlap.

Cork.

Cotton linters.

Cotton goods.

Cranes—

- (a) Locomotive.
- (b) Electric traveling.
- (c) Gantry.
- (d) Shipyard.
- (e) Buckets (grab buckets).
- (f) Hoists.
- (g) Portable electric.
- (h) Electric monorail.
- (i) Wrecking.
- (j) Track pile drivers.

Cylinders and containers (pressure).

Drawing instruments.

Electric equipment—

- (a) Generators.
- (b) Turbines.

for analysis, a record of all Government requirements and cleared all prospective purchases. Such a record would mean only that

Electric equipment—Continued.

- (c) Condensers.
- (d) Pumps.
- (e) Compressors.
- (f) Transformers.
- (g) Current breakers.
- (h) Oil switches.
- (i) Lightning arresters.
- (j) Motors, special, machine tool, and adjustable speed, direct-current, and crane.
- (k) Electrical supplies.

Electric wire and cable.

Explosives and components thereof.

Felts.

Fire prevention apparatus—

- (a) Hand fire extinguishers.
- (b) Fire hose.

Forging and machining for guns, projectiles, or shafts.

Hardware, mill, plumbers', and heating supplies.

Hides and skins.

Iron and steel, of which the following are allocated through the director of steel:

- (a) Bands.
- (b) Billets.
- (c) Blooms.
- (d) Boiler tubes.
- (e) Cold-rolled steel.
- (f) Hoops.
- (g) Ingots.
- (h) Merchant bars.
- (i) Pig iron.
- (j) Pipe.
- (k) Plates.
- (l) Rails and accessories.
- (m) Rods.
- (n) Seamless tubing.
- (o) Shapes.
- (p) Sheets.
- (q) Sheet bars.
- (r) Sheet steel.
- (s) Skelp.
- (t) Slabs.
- (u) Tin plate.
- (v) Wire and wire products.
- (w) Wire rope.

Knit goods.

Leather and leather goods.

Linen and linen thread.

Lumber.

Machine guns and accessories (cleared through Ordnance Department, United States Army).

Metal-working machinery, including tools, forge-shop machinery, and plate-working machinery.

Mica (cleared through Bureau of Supplies and Accounts, United States Navy).

Needles.

Nonferrous metals:

- (a) Aluminum.
- (b) Antimony.
- (c) Copper.
- (d) Lead.
- (e) Zinc.
- (f) Mercury (cleared through Bureau of Supplies and Accounts).
- (g) Nickel.
- (h) Tin.

the Government knew what commodities it would need, and had coordinated all of its purchases. But it did not follow, of course, that the whole or any of industry would nicely adjust itself so as to produce or to deliver commodities in precisely the order which these Government requirements demanded. One of the most vital of all the War Industries Board controls came by reason of its power to tell the industry of the country what orders should have priority in production and what in delivery. It meant, in a word, that the War Industries Board, through thousands of decisions, must decide the relative importance of services and of commodities for war purposes. The determination of those priorities arose in all manner of ways between the various departments of the Government; the Allies; the Government and the Allies; the Government and individuals; the Allies and individuals; and as between particular individuals.¹ The details involved in the administration of priorities control are deserving of especial and technical study because they form the basis of almost all the war-industry controls and bear peculiarly upon prices.

The beginnings of control through the issuance of priorities extended back to the authorization of a priority subcommittee by the General Munitions Board on May 3, 1917. The director of the Council of National Defense briefly and pointedly defined the functions of priority by declaring that the committee—

shall exercise full power in the determination of priority of delivery of materials and finished products whenever there is a conflict in delivery in accordance with the general policy of the Government. It is further understood

Oil:

Castor oil (cleared through Signal Corps, United States Army).

Linseed oil.

Optical glass and optical instruments.

Paper, 100 per cent sulphate, Kraft.

Paper and paper pulp.

Power equipment.

Railway equipment.

Rubber.

Rubber goods.

Silk noll and silk cartridge cloth.

Small arms (small-arms ammunition) cleared through Ordnance Department, United States Army.

Small tools.

Tobacco.

Typewriters.

Wool.

Woolen goods.

It would be amiss to omit the precise wording by which the priorities committee of the War Industries Board later defined, over and again, the purpose of priorities and the method of determining them: The paramount purpose of priorities is the selective mobilization of the products of the soil, the mines, and the factories for direct and indirect war needs in such a way as will most effectually contribute toward winning the war. In requesting priority the petitioner should join with the committee in applying the test: To what extent, if at all, will the granting of this application contribute, directly or indirectly, toward winning the war; and if at all, how urgent is the need.

that at present the priority committee of the General Munitions Board has no power in regard to the determination of priority in regard to civilian needs in which the Army and Navy requirements are not involved. It is further understood that as between the needs of our Allies and our civilian population, the priority committee of the General Munitions Board for the present has no authority to act. In this connection, however, the priority committee should keep full information as to such cases or instances as come to its attention, in order that plans may further be developed for properly handling the matter.

That early committee, though not given all powers which were later granted, was forced upon the General Munitions Board by reason of the quantities of requests from manufacturers and contractors doing Government work asking which orders should be filled first. Before mid-summer the new committee was receiving from 50 to 75 appeals a day for preference policies. But the real work of control through priorities began early in the fall of 1917, after the creation of the War Industries Board, and with the appointment of Judge Robert S. Lovett to priority supervision.¹

Authority for priority control.—Congress seems to have authorized control of industry through the issuance of priorities more specifically than any of the other controls exercised by the War Industries Board. The act of August 29, 1916, said:

That a Council of National Defense is hereby established for the coordination of industries and resources for the national security and welfare. It shall be the duty of the Council of National Defense to supervise and direct investigations and make recommendations to the President and the heads of executive departments as to the location of railroads with reference to the frontier of the United States so as to render possible expeditious concentration of troops and supplies to points of defense; the coordination of military, industrial, and commercial purposes in the location of extensive highways and branch lines of railroad; the utilization of waterways; the mobilization of military and naval resources for defense; the increase of domestic production of articles and materials essential to the support of armies and of the people during the interruption of foreign commerce; the development of sea-going transportation; data as to amounts, location, method and means of production, and availability of military supplies; the giving of information to producers and manufacturers as to the class of supplies needed by the military and other services of the Government, the requirements relating thereto, and the creation of relations which will render possible in time of need the immediate concentration and utilization of the resources of the Nation.

That legislative authorization, the agreement between the more important Government departments,² the various resolutions of the

¹ Judge Edwin B. Parker, by appointment from the priorities commissioner Judge Robert S. Lovett, was put in active charge of the organization of the new committee on Aug. 23, 1917. After Mar. 4, 1918, Judge Parker succeeded Judge Lovett as priorities commissioner and chairman of the priorities committee.

² The President, the Secretary of War, the Secretary of Navy, the chairman of the United States Shipping Board, and the president of the United States Shipping Board Emergency Fleet Corporation agreed to confer upon Judge Lovett, and through him, the priorities committee, such powers of priority as lay within their legal right. The important priority circulars were signed by each of these officials except the President.

Council of National Defense,¹ and the President's letter of March 4, 1918, declaring that one of the six functions of the War Industries Board should be—

the determination, wherever necessary, of priorities of production and of delivery and of the proportions of any given agencies when the supply of that article is insufficient, either temporarily or permanently,

gave an abundance of war-time authority for the exercise of wide priority powers.

The priority circulars.—The consideration of 211,430 applications² for priority in production or delivery, made by agencies having war needs, was a highly complicated and technical business. The priorities committee set about that task in a thoroughgoing manner when it issued priority circular No. 1 on September 21, 1917, giving general directions as to priority and outlining the method of applying for priority assistance. That and subsequent circulars attempted to classify and rate orders in accordance with their relative need for war and national purposes.³ The first circular required that a rating of orders be made only by persons producing iron and steel or their products. The classes of producers required to observe priority rating in the fulfillment of their contract orders were extended gradually from that beginning until on July 1, 1918, the well-known circular No. 4 was issued stating that—

during the war in which the United States is now engaged all individuals, firms, associations, and corporations engaged in the production of raw materials and manufactured products (save foods, feeds, and fuels) are requested to observe regulations respecting priority.⁴

The War Industries Board came then into priority control over virtually the whole industry (not already controlled by the Food Administration and Fuel Administration) of the country.

The method of rating.—The priorities committee, in order that purchasers and producers might know what priority to follow, di-

¹ Note especially the resolution of Sept. 25, 1917, assigning the priorities activities of the War Industries Board of the Council of National Defense to Judge Lovett.

² A large number of applications for priority assistance were handled prior to Sept. 21, 1917, the date when the use of formal application blanks and formal certificates was begun. The first priority certificate issued was dated Sept. 25, 1917. Since that date 211,430 applications have been received; 191,968 priority certificates have been issued, of which, however, 8,448 were reissued certificates with amended ratings; 27,912 declinations and withdrawals of applications were issued. The highest number of applications received and numbered in one day was 1,901 on July 8, 1918. The highest number of certificates issued in one day was 2,121 on Sept. 30, 1918. Weekly reports of applications received and certificates issued are to be found in the weekly "Office Review."

³ In order to get the system satisfactorily started all orders which had been placed prior to Sept. 21, 1917, by or on behalf of the War Department, the Navy Department, or the United States Shipping Board Emergency Fleet Corporation were automatically rated as class A-1 unless otherwise directed; and, likewise, all orders for military supplies and equipment placed by or for the Allies as class A-2.

⁴ There were in all issued 60 separate priority circulars from Sept. 21, 1917, to Dec. 20, 1918, extending the control over priorities. Circular No. 60, issued on the latter date, revoked as of Jan. 1, 1919, all rules, regulations, and directions of every nature issued by the priorities division.

vided all orders and work into five general classes: Class AA, class A, class B, class C, and class D, with subdivisions of class AA, class A, and class B, indicated by suffix number, thus: Class AA-1, class AA-2, etc.; class A-1, class A-2, etc.; class B-1, class B-2, etc.¹ Orders and work in class AA took precedence of orders and work in all other classes; those in class A took precedence of those in classes B, C, and D; those in class B took precedence of those in classes C and D; those in class C took precedence of those in class D; all irrespective of the dates the orders were placed. The classification of an order meant that it should be given such precedence over orders of a lower classification as were necessary (and only such as were necessary) to insure delivery on the date specified in the order. It did not mean that work should cease on orders of a lower classification, or that the order should be completed and delivery made in advance of orders taking a lower classification if this was not necessary to effect delivery within the time specified. Any person or agent, entitled to preferential treatment under the policies of the priorities committee, ordinarily made application to the committee for an order running against a manufacturer or distributor and calling for delivery by a certain date. The priorities committee, if impressed after a consideration of the claim, assigned one or the other of the above ratings to the order and issued a certificate. This certificate was issued to the applicant direct, unless otherwise requested, and not to the person against whom it ran. The applicant then presented his certificate to the person against whom it ran, and the latter arranged his production program to give delivery to that priority order in its relative turn with respect to other priority orders.

Automatic rating.—It was soon found that certain classes of orders so obviously deserved preference, that a priority rating could be assigned automatically. A scheme of automatic classifications was set up accordingly, on July 1, 1918,² which made unnecessary any application for certain written priority certificates, or any refer-

¹ Class AA comprised only emergency war work of an exceptional and urgent nature.

Class A comprised all other war work; that is to say, orders and work necessary to carry on the war, such as arms, ammunitions, destroyers, submarines, battleships, transports, merchant ships, and other water craft, airplanes, locomotives.

Class B comprised orders and work which, while not primarily designed for the prosecution of the war, yet were of public interest and essential to the national welfare or otherwise of exceptional importance.

Class C comprised all orders and work not covered by priority certificates issued by the priorities committee or not taking an automatic rating, which orders and work were to be utilized in furtherance of one or more of the purposes embraced within the "General classification of purposes demanding preference treatment" promulgated by the priorities board, or which orders and work were placed by or utilized in connection with an industry or plant appearing on preference list No. 1. No class C certificates were issued.

Class D comprised all orders and work not embraced in class AA, class A, class B, or class C, and no certificates were issued therefor.

² See secs. 7, 8, 9 of priority circular No. 4.

ence to the priorities committee. The applicant simply attached to his order an affidavit in prescribed form setting forth the facts essential to automatic rating, and the war uses for which materials were needed.

The new scheme gave no automatic rating higher than A-4, thus leaving the ratings of AA, AA-1, AA-2, etc., A-1, A-2, A-3 to be given only by specific action of the Priorities Committee. All orders by the War Department, the Navy Department, or the Emergency Fleet Corporation, falling within class A were automatically rated A-5 upon their proper signature to the following statement:

Unless rerated by express order in writing by the Priorities Committee of the War Industries Board, this order is by authority of said Priorities Committee rated as class A-5, and its execution shall take precedence over all your orders and work of a lower classification to the extent necessary to insure delivery according to the date specified herein, as prescribed by Circular No. 4, issued by the priorities division of the War Industries Board, of date July 1, 1918, and all amendments thereto.

There was set forth a series of automatic ratings covering all priorities below A-4, which gave the applicant, when an affidavit was attached stating that materials would be used for purposes having the specified rating, his proper precedence.¹

¹ Circular No. 4, issued July 1, 1918, recognizes the following purposes which may take priority rating automatically as indicated:

(a) For the manufacture of turbines (all classes)-----	A-4
(b) For the repair or construction of steam railroad locomotives for use on the railroads under the jurisdiction of the United States Railroad Administration-----	A-4
(c) For the production of electrodes-----	A-5
(d) For the manufacture of rope wire and of wire rope-----	A-5
(e) For the building of ships or other water craft for and under direct contracts with the United States Shipping Board, Emergency Fleet Corporation-----	A-5
(f) For the building of all cargo water craft (but not pleasure craft) save such as are under construction by or for the United States Shipping Board, Emergency Fleet Corporation-----	A-6
(g) For the manufacture of machine tools for working both metal and wood; of machinists' tools, of small tools, of hand tools, and of mining tools, machinery, and equipment-----	A-6
(h) For the manufacture of steam railroad materials, equipment, and supplies (other than locomotives), for use on the railroads under the jurisdiction of the United States Railroad Administration-----	B-1
(i) For the manufacture of locomotive cranes and traveling cranes-----	B-1
(j) For the manufacture of electrical equipment other than turbines (but not electrical supplies as distinguished from equipment)-----	B-2
(k) For the manufacture of farm implements-----	B-2
(l) For the manufacture of textile machinery-----	B-2
(m) For the manufacture of tools, implements, machinery, and equipment required for the production, harvesting, distribution, milling, canning, and refining of foods and feeds-----	B-2
(n) For the manufacture of binder twine and rope-----	B-2
(o) For the manufacture of oil-well supplies or equipment, by which is meant supplies for the production of petroleum and natural gas, but not including pipe lines, storage tanks of 1,000 barrels capacity or over, tank cars, or refineries-----	B-2

Each order for materials, equipment, or supplies for such purposes or uses as fall within class C, as defined by the priority committee, will automatically be classed as class C; and all orders save such as are automatically classed above shall be automatically classed as class D unless otherwise provided.

Unifying priorities in production and those in delivery.—A serious need soon developed for a more organized attention to priorities in delivery such as had already been given to priorities in production. It was found that, even when manufacturers had observed priority policies in making materials, confusion and conflicts within the Government were delaying the deliveries of those materials. The President in his letter of March 4, accordingly, suggested the creation of a Priorities Board within the priorities division. That board, by his recommendation, was made to include representatives from the various Government departments in order that, after a priority of delivery had been determined upon, there might be "common, consistent, and concerted action to carry it into effect." The priorities division was then composed of a priorities committee and a Priorities Board, the latter administering the policies of the former. The priorities commissioner, as the War Industries Board member in charge of the priorities division, was chairman of both the board and the committee. The committee and the board working together, after the creation of the latter on March 27, 1918, effected a greater harmony in the administering of priorities over production and deliveries.

Purposes demanding preferential treatment.—A very important undertaking of the Priorities Board was its issuance on March 27, 1918, of a general classification of purposes demanding preferential treatment for the guidance of agencies in the production, supply, and distribution of raw materials, finished products, electrical energy, fuel and transportation by rail, water, pipe lines, and otherwise. That list gave preference to the raw materials going into, or supplies necessary to, the manufacture of ships, aircraft, munitions, military and naval supplies and operations, fuel, food and collateral industries, clothing, railroads, and public utilities. These were the "purposes" demanding preference treatment and were made known to the whole Government. The issuance of ever increasing numbers of priority orders had long since made the problem of synchronizing priorities within the Government and the industry an involved one. The Priorities Board, by drawing into its deliberations other governmental departments (Railroad Administration, Emergency Fleet Corporation, the War Trade Board, the Fuel Administration, the Allied Purchasing Commission, the War Labor Policies Board, the Army, and the Navy), created a unit to administer priority orders, as well as to help form them. The cooperative scheme worked with great effectiveness, for, it should be noted, the decisions of the Priorities Board so organized were subject to review only by the chairman of the War Industries Board and by the President. The general classification of purposes demanding preference treatment made by the Priorities Board, and its later similar but more refined preference

lists, went a long way toward uniting the Government and the industry upon priority policies.

The preference lists.—A list of 45 industries (more commonly known as "Preference list No. 1") where operations were deemed of exceptional importance during the war, was drawn up by the Priorities Board on April 6, 1918. The list was made for the guidance of all agencies of the Government in the supply and distribution of coal and coke, in the supply of transportation by rail or water, and for the movement of coal and coke to those industries. The scope of that list was extended to cover 73 industries.¹ and it was again very much broadened by "Preference list No. 2," and its supplement issued respectively on September 3 and October 1, 1918.

The purpose of the preference list, as it stood at the signing of the armistice, was to govern the Government and others in the production and supply of fuel and electric energy to certain necessary industries: in the supply of labor; and in the supply of transportation service by rail, water, pipe lines, or otherwise. The preference list, including the 73 industries, was made up of industries entitled to preferential treatment. But the inclusion of those industries, or the plants on the 7,000 list, did not operate as an embargo against all others. The requirements of all other industries and plants were simply deferred until the requirements of those on the preference list were satisfied. In the compilation of this list, industries and plants were divided according to their relative importance into four classes, viz, Class I, Class II, Class III, and Class IV.²

¹ List No. 2, unlike list No. 1, included also an individual rating for about 7,000 specific plants. This departure was made in cases where it seemed that particular plants should have preference even though the industries to which they belonged should not; or where particular plants deserved a higher rating than that given their industry. Each of these plants which failed to file a monthly report of its activities was dropped from the preference list.

² *Class I.*—Aircraft: Plants engaged principally in manufacturing aircraft or aircraft supplies and equipment. Ammunition: Plants engaged principally in manufacturing same for the United States Government and the Allies. Army and Navy: Arsenal and navy yards. Army and Navy: Cantonments and camps. Arms (small): Plants engaged principally in manufacturing same for the United States Government and the Allies. Blast furnaces: Producing pig iron. Chemicals: Plants engaged principally in manufacturing chemicals for the production of military and naval explosives, ammunition, and aircraft, and use in chemical warfare. Coke: Plants engaged principally in producing metallurgical coke and by-products, including toluol. Domestic consumers: Fuel and electric energy for residential consumption, including homes, apartment houses, residential flats, restaurants, and hotels. Explosives: Plants engaged principally in manufacturing same for military and naval purposes for the United States Government and the Allies. Feed: Plants engaged principally in preparing or manufacturing feed for live stock and poultry. Foods: Plants engaged principally in producing, milling, refining, preserving, refrigerating, wholesaling, or storing food for human consumption embraced within the following description: All cereal and cereal products, meats including poultry, fish, vegetables, fruit, sugar, sirups, glucose, butter, eggs, cheese, milk and cream, lard, lard compounds, oleomargarine and other substitutes for butter or lard, vegetable oils, beans, salts, coffee, baking powder, soda, and yeast; also ammonia for refrigeration. Gas: See oil and gas, also public utilities. Guns (large): Plants engaged principally in manufacturing same for the United States Government and the Allies. Hospitals: See Public institutions and buildings. Mines: Coal. Navy yards: See Army and Navy.

The order by alphabetical listing has no significance, but all industries and plants grouped under class I had exceptional im-

Oil and gas: Plants engaged principally in producing oil or natural gas for fuel or for mechanical purposes, including refining or manufacturing oil for fuel, or mechanical purposes. Oil and gas: Pipe lines and pumping stations engaged in transporting oil or natural gas. Public institutions and buildings (maintenance and operation of): Used as hospitals or sanitariums. Public utilities: Gas plants producing toluol. Railways: Operated by United States Railroad Administration. Sanitariums: See public institutions and buildings. Ships (maintenance and operation of): Excluding pleasure craft not common carriers. Ships: Plants engaged principally in building ships, excluding (a) pleasure craft not common carriers, (b) ships not built for the United States Government or the Allies nor under license from the United States Shipping Board. Steel-making furnaces: Plants engaged solely in manufacturing ingots and steel castings by the open-hearth, Bessemer, crucible, or electric furnace process, including blooming mills, billet mills, and slabbing mills for same. Steel-plate mills. Toluol: See coke, also public utilities.

Class II.—Brass and copper: Plants engaged principally in rolling and drawing copper, brass and other copper alloys in the form of sheets, rods, wire, and tubes. Coke: Plants, not otherwise classified or listed, producing same. Copper and brass: See brass and copper. Cranes: Plants engaged principally in manufacturing locomotive cranes. Ferro-alloys: Plants engaged principally in producing ferrochrome, ferromanganese, ferromolybdenum, ferrosilicon, ferrotungsten, ferrouanium, ferrovanadium, and ferrozirconium. Gas: See oil and gas. Machine tools: Plants engaged principally in manufacturing same. Mines: Producing metals and ferro-alloy minerals. Navy department: See War and Navy Departments. Public utilities: Street railways, electric lighting, and power companies, gas plants not otherwise classified, telephone and telegraph companies, water supply companies, and like general utilities. Public utilities: Plants engaged principally in manufacturing equipment for railways and other public utilities. Railways: Not operated by United States Railroad Administration (excluding those operated as plant facilities). Rope wire: See wire rope. Steel rail mills: Rolling rails 50 or more pounds per yard. War and Navy Departments: Construction work conducted by either the War Department or the Navy Department of the United States in embarkation ports, harbors, fortified places, flood protection operations, docks, locks, channels, inland waterways, and in the maintenance and repair of same. Wire rope and rope wire: Plants engaged principally in manufacturing same.

Class III.—Buildings: See public institutions and buildings. Chain: Plants engaged principally in manufacturing iron and steel chain. Cranes: Plants engaged principally in manufacturing traveling cranes. Domestic consumers: Fuel and electric energy not otherwise specifically listed. Electrical equipment: Plants engaged principally in manufacturing same. Explosives: Plants, not otherwise classified or listed, engaged principally in manufacturing same. Foods: Plants engaged principally in producing, milling, preparing, refining, preserving, refrigerating, or storing foods for human consumption not otherwise specifically listed (excepting herefrom plants producing confectionery, soft drinks, and chewing gum). Gas: See oil and gas. Ice: Plants engaged principally in manufacturing same. Mines: Plants engaged principally in manufacturing mining tools or equipment. Oil and gas: Plants engaged principally in manufacturing equipment or supplies for producing or transporting oil or natural gas, or for refining and manufacturing oil for fuel or for mechanical purposes. Public institutions and buildings (maintenance and operation of): Other than hospitals and sanitariums. Steel: All plants operating steel rolling and drawing mills, exclusive of those taking higher classification. Tin plates: Plants engaged principally in manufacturing same. Tools: Plants engaged principally in manufacturing small or hand tools for working wood or metal.

Class IV.—Agricultural implements: See farm implements. Bags—hemp, jute, cotton: Plants engaged principally in manufacturing same. Boots and shoes: Plants engaged exclusively in manufacturing same. Chemicals: Plants, not otherwise classified or listed, engaged principally in manufacturing chemicals. Cotton: Plants engaged in the compression of cotton. Cotton textiles: See textiles. Drugs—medicines and medical and surgical supplies: Plants engaged principally in manufacturing same. Farm implements: Plants engaged principally in manufacturing agricultural implements and farm operating equipment. Fertilizers: Plants engaged principally in producing same. Fire brick: Plants engaged principally in manufacturing same. Food containers: Plants engaged principally in manufacturing same. Foundries (iron): Plants engaged principally in the manufacture of gray iron and malleable iron castings. Insecticides and fungicides: Plants engaged principally in manufacturing same. Laundries. Newspapers and periodi-

portance in connection with the prosecution of the war. Their requirements were fully satisfied in preference to those of the three remaining classes. Requirements of industries and plants grouped under class II, class III, and class IV had precedence over those not appearing on the preference list. As between these three classes, however, there was no complete or absolute preference. The division into classes was for the purpose of presenting a composite picture of the relative importance of the industries and plants embraced within each group. It was not intended that the requirements of class II should be fully satisfied before supplying any of the requirements of class III or that those of class III should be fully satisfied before supplying any of those of class IV.

War-industry controls center about priorities.—The widest of all the controls extended over industry by the War Industries Board was that which it got by determining for industry what priority should be given all war orders both in production and in delivery. The other kinds of control exercised, indeed, led into priorities control. It came to be the strongest weapon in the hands of the Government for enforcing its industrial control rules. The Government, through the War Industries Board, estimated its requirements and made clearances for war purchases. But those actions really did no more than pave the way to control. They did not generally reach beyond the walls of the Government. They enabled a single agent of the Government to say what the war would require from all industry and when. The so-called requirement and clearance controls simply opened a way, then, if there appeared a shortage, for the board to allocate the war orders to the trade, to curtail certain industries and to conserve nonessential production. But these potent controls, it should be emphasized, all tied directly into the control over priorities, for by determining priorities, in a large way, the War Industries Board enforced them. It seems doubtful whether any other control during the war, amid the confusion and conflict of orders within the Government and out, introduced a scheme so powerful in its effects toward synchronizing production and deliveries for war ends.

cals: Plants engaged principally in printing newspapers or periodicals which are entered at the post office as second-class mail matter. Paper and pulp: See pulp and paper. Periodicals: See newspapers and periodicals. Pulp and paper: Plants engaged exclusively in manufacturing same. Rope: See twine and rope. Soap: Plants engaged principally in manufacturing same. Surgical supplies: See drugs and medicines. Tanners: Plants engaged principally in tanning leather. Tanning: Plants engaged principally in manufacturing tanning extracts. Textiles: Plants engaged principally in manufacturing cotton textiles, including spinning, weaving, and finishing. Textiles: Plants engaged principally in manufacturing woolen textiles, including spinners, top makers, and weavers. Textiles: Plants engaged principally in manufacturing cotton or woolen knit goods. Textiles: Plants engaged principally in manufacturing textile machinery. Tobacco: Only for preserving, drying, curing, packing, and storing same—not manufacturing and marketing. Twine (binder) and rope: Plants engaged principally in manufacturing same. Woolen textiles: See textiles.

This powerful scheme, permitting the Government at any moment to check the production of a less essential commodity for a more essential one, gave it an effective instrument to control prices. Priorities, of course, were not designed or ever issued specifically to "peg" prices. But, for all that, in a very real, though indirect, way they did affect prices to greater and lesser extents.¹ Threats of a shortage in a basic material ordinarily provokes confusion and soaring prices, and opens the door to competitive bidding for priority. Those bid prices are made in war time with less regard to the actual cost of production than to the cost of purchasing priorities in production and delivery under an abnormal condition. But the priority policies announced to the country that it could not at any price purchase priorities either in production or deliveries. Priorities, it came to appreciate, were determined and controlled by the Government solely for war ends. While the priorities system was not an instrument for the fixing of prices, the stabilizing effects of priorities control upon prices were not less powerful because there is no way in which they can be measured.

ALLOCATIONS.

All of the relations which allocation bore to price control are covered in a study of the Government requirements, the clearance list, and priorities. The allocation of Government requirements, or clearances, meant simply their distribution to particular industries and firms for fulfillment. The requirements division, after clearing all of the prospective purchases of the Government, forwarded a record of those immediate needs to the proper commodity section chiefs. The commodity chief and his staff, after determining whether there was a shortage of the commodity required, either allocated the order or returned it without restriction. The Government department, from which the order asking for privilege to purchase had originally come, if there was no shortage, could buy its goods in the open market without restriction. But, where the commodity section had found a shortage, the section itself allocated the order to various parts of the industry or firms before returning it. Allocation, obviously, was not a separately administered function of any division of the War Industries Board as were most of the other controls. It was really a principle of procedure, commonly followed by all of the commodity sections, designed properly to distribute the burden or fruit of certain Government orders. It pertained only to purchases of those commodities in which a shortage threatened.

¹The War Industries Board goes so far as to write into its final report that "war prices were high prices, but they were stabilized prices. The most effective organ of stabilization was the operation of the priorities system."

CURTAILMENTS.

Curtailement was commonly administered by various units within the War Industries Board when an extremely serious shortage threatened. The production of certain less essential commodities was cut off or curtailed to make way for the production of allocated and other orders. The administration of priorities was one of the most effective instruments of curtailement, and the material for a study of curtailement falls largely in that chapter. The curtailement of all or any part of an industry, because much more sweeping and heartless than its conservation, was a program entered upon with far more caution. An Industrial Adjustment Committee, composed of representatives from the War Industries Board, the War Trade Board, the Food Administration, the Fuel Administration, the United States Shipping Board, the War Labor Policies Board, and the Treasury Department, was appointed upon the approval of the President to form a plan for the safe but systematic curtailement of nonessential industries. That committee, after permitting the industries affected a hearing, determined upon curtailement policies which would effect equitable reductions without killing the industry. The actual administration of all curtailement programs, as were those for conservation, was put into the hands of the commodity sections of the War Industries Board.

CONSERVATION.

The War Industries Board, after balancing roughly the Government and civilian demands against supplies, found, in the main, that the threatened shortages could be met adequately without absolute curtailement by so-called conservation programs. The conservation of a supply, as distinguished from cutting it off or curtailing it, meant simply spreading its use out thinner. The board, under its conservation division,¹ studied carefully the industries which were not strictly serving the war requirements and set itself to eliminate their wastes and turn their available materials to the best war uses. The purpose of conservation was, by means of substitution, conservation or standardization to give the military, naval and shipping agencies of the war machine exactly what they required for full effectiveness. It was the business of the War Industries Board, with all war demands coming under its eye, to introduce schemes of efficiency for the proper coordination of supply and demand.

¹ The conservation division of the War Industries Board was created May 9, 1918, to carry on the work commenced on Mar. 24, 1917, by the commercial economy board under the Council of National Defense. The function of the new division, as outlined by the President in his letter of Mar. 4, was "the studious conservation of resources and facilities by means of scientific, industrial, and commercial economies."

Conservation measures were effected, outside the Government and in, by the strictest cooperation with the industry through the various war-service committees and by technical advice and consultation with the Government war-making agencies. Those measures scarcely permit of a tangible analysis because of their number and their variety. Conservation, however, was generally effected by securing a maximum reduction in the number of styles, varieties, sizes, colors, or finishes of the product; eliminating the number of styles and varieties that took more than the amount of material strictly necessary (as, for example, restricting the length and sweep of overcoats); eliminating features or accessories which used materials for adornment or convenience but which were not essential to the utility of the product; eliminating patterns and types of products which were less essential to the civilian needs; substituting materials which were plentiful in the place of those which were not plentiful and were needed for the war program (for example, zinc was substituted for steel and other metals); discontinuing the use of certain materials for unnecessary purposes (such as caustic soda in the manufacture of automobile tires); standardizing sizes, lengths, widths, weights, thicknesses, and gauges of materials, parts and sections; reducing the excessive waste of materials in manufacturing processes (such as chrome chemicals in certain branches of the leather-tanning industry); securing economy in samples used for selling products; securing economy in containers by eliminating boxes or cartons which required excessive shipping space (as, for example, eliminating small sizes of containers); securing economy in packing by increasing the number of units per package.

Under this general scheme, the board made conservation rules applicable to various industries and, before putting them into effect, asked each industry for technical advice upon them. Once adopted, the enforcement of each conservation program was left for administration to the proper commodity chief.

No adequate analysis can ever be made to cover in full the extent of saving which each of the conservation programs effected. A comprehension in general of the more specific programs undertaken, however, is vital because of its bearing upon price control. The programs, in each case, were addressed by necessity to the industries themselves through the War Industries Board, since there was no means of effective enforcement other than the enlistment of their cooperation. The more important of the programs were those intended to conserve materials within the agricultural implement, automobile tire, barrel goods, bedding, bicycle, book cloth, bottle, boys' clothing, camera, chain, chandelier, chinaware, clock, composition roofing, corset, delivery service, electric appliance, fabric glove, felt shoe, furnace, furniture, gas range, hand stamp and mark-

ing device, hardware, harness and saddlery, hosiery and underwear, household wringer, leather glove, mackinaw, men's clothing, metal bedstead, motorcycle, moving-picture machine, office appliance, oil refining, oil storage tank and pump, oil stove and heater, optical goods, overall, paint, pencil, plumbing supply, radiator, railroad machinery, range, refrigerator, rubber clothing, rubber footwear, rubber goods, safe and vault, shoe, steel pen, steel pipe, stove, straw hat, sweater, talking machine, thread, tin, tin plate, traveling bag, trunk, typewriter ribbon, vacuum cleaner, vehicle, waist, washing machine, weather-strip, wholesale dry goods, wooden container, wool felt hat, and women's clothing industries.

The conservation program, put well underway by the War Industries Board before the end of the war, was a big and comprehensive one. It, like the priority program, had a very vital though a very intangible bearing upon the price level. The stabilizing effect of the one upon prices is as impossible to measure as the other. But the conservation schedules introduced into various industries, while generally of a less potent influence upon prices than the priority certificates, must be taken into account in an analysis of price control. Conservation, by turning materials into strictly essential industry and spreading their uses out thinner, helped to postpone the shortage point and stave off higher rises in price.

PRICES.

The War Industries Board was not a price-fixing agency strictly speaking, but it did undertake a wide range of formal and informal price controls through agreements with the industry. The creation of the price-fixing committee in March, 1918, relieved the board proper of the further administration of virtually all its important price-fixing work, though it did afterwards exercise some price control. The peculiar relation of the War Industries Board and the price-fixing committee and the difficulties of separating clearly their controls make it advisable to divide the discussion of what these two organizations did in regulating prices. A statement of individual price regulations undertaken by the War Industries Board is, therefore, postponed until after the general discussion of the work of the price-fixing committee.

5. THE PRICE FIXING COMMITTEE.

There was not, during the last seven months of war, any other agency of the Government at Washington so strictly giving its whole attention to the business of fixing prices as the price fixing committee. The President had come to believe in the necessity of systematic methods of determining the great basic raw-material prices, and on March 4, 1918, wrote asking that price determination problems be transferred from the War Industries Board to a special, independent committee. That action came long after the Food Administration had assumed control over food prices, and the Fuel Administration control over fuel prices. It marked a clear break with earlier methods of price control, though not necessarily with earlier policies, and was the longest stride toward a somewhat organized price fixing that was taken.

The new price fixing committee, created too late to formulate the initial price policies upon many of the basic materials, grew week by week, through revisions of earlier policies and the initiation of new controls, into a direct responsibility for the majority of all general fixed prices.¹ To understand the committee's work it is necessary to know how the price fixing committee was organized, what basis of power it had to fix prices at all, the sphere of its activity within the Government, the character of price agreements entered into by it, the price policies which the committee worked out, and how it enforced its price regulations.

(1) ORGANIZATION OF THE COMMITTEE.

The price fixing committee, created under the authority of the President's letter to Mr. Bernard M. Baruch, dated March 4, 1918, was made up of a chairman, a representative of the War Department, a representative of the Navy Department, a representative of the Fuel Administration, a representative of the Tariff Commission, a representative of the Federal Trade Commission, the labor representative of the War Industries Board, and the chairman of the War Industries Board ex officio.² This committee, appointed by the President, was

¹ The first meeting of the price fixing committee was held in the War Industries Board on Mar. 14, 1918.

² The organization in full of the price fixing committee at the time the armistice was signed was as follows: Robert S. Brookings, chairman; Bernard M. Baruch, chairman of the War Industries Board ex officio; F. W. Taussig, chairman United States Tariff Commission; W. B. Colver, chairman Federal Trade Commission; H. A. Garfield, United States Fuel Administrator; Hugh Frayne, labor representative of the War Industries Board; Commander John M. Hancock, representing the Department of Navy; Lieut. Col. Robert H. Montgomery, representing the Department of War; Henry C. Stuart, representing the Department of Agriculture; and W. W. Phelps, secretary.

called together by the War Industries Board for its first meeting, and by them given its original general instruction.¹ This quasi-judicial committee thereafter, whether in regular executive session or in conferences with the trade, sat at times almost continuously in the Council of National Defense Building.

It is not precisely accurate to say that the price fixing committee was either independent of the War Industries Board or that it was a subsidiary part of the board. Not to the very last were it and the board agreed concerning the place of the committee in the War Industries Board organization. The President, in reorganizing the board on March 4, 1918, had provided for the creation of a price-fixing committee in the same letter by which he outlined the functions of the board and appointed Mr. Bernard M. Baruch its chairman. The board, after the appointment of the committee, formally marked out a set of policies for the committee, and its chairman called together the committee for their first meeting and told them their function. The chairman of the board, indeed, and another member were made members of the committee. The committee took over formally the fixing and revision of many prices already considered by the board and worked hand in glove with it. The committee announcements were printed as from the price fixing committee of the War Industries Board. But there was no real authority which the board held over the committee.

The President in his letter specifically took price determination from the board and gave it to a separate committee, and he, independent of the board, named the members of the price fixing committee. The committee considered itself responsible directly to the President and, irrespective of the board, made its reports to him.² It was the President, not the board, who approved all prices fixed and made them official.

¹ The functions of the price fixing committee as determined by the War Industries Board, earlier that day, and delivered to the committee, were as follows: (1) To advise upon prices of basic materials; (2) from time to time to advise as to general price policies, acting in this way as a coordinating price body; (3) the committee will advise when requested by any department upon a specific contract, assuming, however, that no department will submit for advice those problems which it is organized and qualified to handle itself; and (4) when materials are commandeered prices of the same will be fixed by this committee.

² Mr. Robert S. Brookings, chairman of the price fixing committee, in a conference held with the copper industry as late as July 2, 1918 (price fixing committee minutes for that day, p. 433), said: "The facts are, we represent the President absolutely. Our appointment, while we are a part of the War Industries Board, is absolutely separate and distinct; we have absolutely separate and distinct obligations. * * * We submit these things to him (President) for approval when they involve a change, or when there is anything to approve; in fact, we go into detail sometimes more than I think he cares to have it, because we have reason to know that when it comes to exercising a far-reaching judgment, especially where it involves the Nation, he frequently has suggestions to make."

(2) THE BASIS OF POWER TO FIX PRICES.

After what has already been said about the legal basis of the powers exercised by the War Industries Board at large, it will not be surprising to find that the legal basis of the price fixing committee's work was somewhat indefinite. This committee, though determining a far wider range of prices than either, had only a fraction of legal power by comparison with its sister price-determining agencies, the Food Administration and the Fuel Administration. No specific statute could be quoted as its authority for deciding what prices should be. That fact, beyond doubt, somewhat circumscribed its method of price fixing, if not the extent, and made the committee fix prices almost altogether by agreements with the producers.

THE THREATS OF REQUISITIONING AND COMMANDEERING.

But, if there was no law to which the price fixing committee might turn for making its decrees effective, there were other less direct yet, in war time, equally powerful weapons. Foremost among these, as all producers knew, were the well-nigh absolute rights to requisition goods or place commandeering orders with plants for supplies. True, neither of those powers was open to the Government for other than its own needs, but there could scarcely have been made a more satisfactory resort for war times. The latent power, given to the President by authority of the food control act and the national defense act, under which virtually all Government requisitioning and commanding were done respectively, enable the price fixing committee in substance to tell producers:

These are the prices to which the Government will agree; if you are willing to enter into a voluntary arrangement with us, you will be paid these prices for your goods, but if you refuse to do so, we will be compelled to ask the properly constituted authorities to commandeer your output or your plant and give you just compensation therefor as provided by statute.¹

The food control act (H. R. 4961, Public No. 41), approved August 10, 1917, was the law which authorized the requisitioning of certain existing properties for the support either of the Army, Navy, or any other public use. It provided in section 10:

That the President is authorized, from time to time, to requisition foods, feeds, fuels, and other supplies necessary to the support of the Army or the maintenance of the Navy, or any other public use connected with the common defense, and to requisition, or otherwise provide, storage facilities for such supplies; and he shall ascertain and pay a just compensation therefor.

This act, which was really the basis for all Government requisitioning of subsistence supplies for the Army during the war, pertained

¹The legal section of the War Industries Board on June 11, 1918, prepared a memorandum in which it concluded that a threat to commandeer expressed in the above form, and made to enforce the fixing of a certain price does not constitute duress.

only to foods, feeds, and fuel and was not, therefore, of so much value to the price fixing committee as the national defense act.

The national defense act (H. R. 12766, Public No. 85), approved June 3, 1916, authorized the Secretary of War to determine reasonable prices for military supplies and, upon failure of compliance, gave the President power to take over any plant. This act, which was the one giving authority for the commandeering of output, made it possible to place with any manufacturing establishment a compulsory order for the production of any manufacture usually produced by the firm. The Government could, thus, by the payment of a just compensation, require or commandeer the whole output of a plant and itself determine the price to be paid for everything taken under compulsory order. This possibility, in so far as the price fixing committee had a legal weapon, was the most formidable weapon the committee had for compelling acceptance of its price determinations.¹

It should be mentioned, too, that, aside from these direct threats to requisition or commandeer, the committee had effective weapons

¹ A brief digest of the main acts, including the two above, under which requisitioning of goods might be accomplished or commandeering orders issued to plants, follows:

1. *Public 41, Sixty-fifth Congress, section 10.*—The food control act authorizes the President to requisition foods, feeds, fuels, and other supplies necessary to the support of the Army or the maintenance of the Navy or any other public use connected with the common defense.

2. *Public 85, Sixty-fourth Congress, section 120.*—The national defense act provides for the placing of orders with any concern for such product or material as may be required, and which is of the nature and kind usually produced, or capable of being produced, by such concern. In the event of a refusal so to produce, the plant of such concern may itself be taken over by the Government.

3. *Public 391, Sixty-fourth Congress, pages 28-29.*—The naval appropriations act authorizes the President to place an order with any person for ships or war material if such ships or material are of the nature, kind, and quantity usually produced or capable of being produced by such person. Upon refusal, here, also, the plant may be taken over. Under this act "war material" is made to include arms, armament, ammunition, stores, supplies, and equipment for ships and airplanes, and everything required for or in connection with the production thereof. Another paragraph provides for the modification or cancellation of any existing contract for the building, production, or purchase of ships or war material. It is further provided that the owner or occupier of any factory in which ships or war material are built or produced shall place at the disposal of the United States, if required, the whole or any part of the output of such factory. Finally, the Government may requisition any factory or part thereof. It is open to argument whether the authority here granted should have terminated on March 1, 1918, no decisive ruling on the point having been made.

4. *Public 23, Sixty-fifth Congress.*—The so-called emergency shipping fund allows the placing of an order with any person for such ships or material as the necessities of the Government, to be determined by the President, may require during the period of the war and which are of the nature, kind, and quantity usually produced or capable of being produced by such person. Also, power is given to requisition ships or parts thereof.

Requisitioning under the war power.—Finally, with regard to the power to requisition, some mention should be made of the war power. The President, as Commander in Chief of the Army and Navy, has undoubtedly a vast field over which he may exercise his control without legislation. Under this head he has a right to take private property for public use upon payment of just compensation, even if such taking is not authorized specifically by Congress. Just how far this right extends it is hard to tell, inasmuch as presidential action would depend on the nature of a given emergency. It is important to make mention of it merely because of the right to requisition which is thus in the hands of the Executive.

for fixing prices in its influence with the Railroad Administration, the Priorities Committee, the Fuel Administration, the War Trade Board, and the Food Administration. These bodies, each in control of a basic material or service, could be persuaded to withhold transportation, license, fuel, supplies, or priority to enforce price agreements demanded by the committee.

THE WAR-TIME SPIRIT.

It made really little difference, while the country was united to achieve a national ideal, that the price fixing committee had a somewhat indefinite statutory authority. For the legal powers of the price fixing committee, applicable at best only to articles needed for the use of the Government, were of much less practical consequence than public opinion and patriotic spirit. The universal feeling of support to public actions taken for a war purpose was the most potent of all powers behind the price fixing committee. The prices in all cases were reached in conferences by agreements with the trade. It is beside the point to inquire whether so slight an authority would suffice for peace-time regulation. No better word can be said for the efficacy of the war-time spirit for enforcing price agreements, despite the lack of law, than that no occasion ever arose for putting to a test the nature or extent of its legal authority.¹

(3) ITS SPHERE OF ACTIVITY.

The sphere of activity peculiar to the price fixing committee, and its distinction from the Food and Fuel Administrations require explanation. Obviously, these latter agencies controlled foods, feeds, and fuels, and left the price fixing committee to determine prices, if necessary, over the whole remaining lot of materials needed for war. But there are other differences less apparent and more important. The price fixing committee, unlike these two administrations, was not a huge institution responsible upon its own initiative to keep consumers' prices stable and send its administrators into every town and city to that end. It was a very small quasi-judicial committee, acting only upon request of a war agency. It sat primarily to hear evidence and determine fair prices for Government purchases, and was concerned almost altogether with producers' prices.

COMMITTEE CONCERNED PRIMARILY WITH GOVERNMENT PURCHASES.

One of the features of the control exercised by the price fixing committee, which differentiates it sharply from the food and fuel

¹ "Price-Fixing as seen by a Price-Fixer," by F. W. Taussig, *Quarterly Journal of Economics*, February, 1919.

controls, was that it was concerned primarily with stabilizing the market for Government purchases. The Food Administration and the Fuel Administration, each with thousands of representatives and an enormous administrative machinery, undertook as their primary concern the stabilization of prices for the public. Their control, designed to cover the whole gamut of food and fuel prices from the big producer to the country retailer, required them, within a much narrower field of activity, to consider greater numbers of problems. But the price fixing committee, with its wider range of controls, and a more highly technical problem, began with the purpose simply to protect the Government. It came but gradually to concern itself with the protection of the public.¹

The price fixing committee, to the end that it might protect the Government in making purchases, was organized to include representatives of the Army and Navy, who could keep it informed of contemplated purchases and price problems which arose in connection with them; representatives of the War Industries Board, who personally were familiar with the available raw materials in various industries and the supply of labor; a representative of the Fuel Administration, through whom control over fuel for manufacturers could be held; and representatives of the Tariff and Federal Trade Commissions, who could supply technical data tending to show how prices would affect production. It was not until toward the last that a representative of the agricultural interests was appointed, and never was it attempted to give the purchasing public, retail trade, or wholesale trade special representation directly in the committee.²

THE COMMITTEE FIXED PRICES ONLY UPON REQUEST.

As already said, the price fixing committee did not deem it a part of its function, as did both the Food and Fuel Administrations, to make and keep strict watch over prices in which the Government itself had no direct concern. The committee, even if inclined to exceed its primary responsibility to protect the Government, had no staff adequate to maintain control over the price level in a larger way. It did not ask for itself any considerable powers of initiating

¹ A statement of this policy is made by a member of the price fixing committee, F. W. Taussig, in the *Quarterly Journal of Economics* for February, 1919, as follows: "The action of the committee in every case had its origin in the circumstance that Government purchases were on a great scale and threatened to disturb market prices. The extension of the function of the committee to the regulation of prices for the public was, if not an afterthought, at all events not among the things contemplated at the start. The committee stepped in when Government purchases threatened to upset the market, but soon found itself compelled to protect the public also."

² Mr. Robert S. Brookings, in an early conference of the committee with the trade (minutes of the price fixing committee, Book II, Apr. 8 to Apr. 24, p. 29), said frankly: "When we fix prices for the Government we have no difficulty, but when we fix prices for the public there is always difficulty."

price control.¹ Yet, the necessities of the case gradually forced the committee to take a broader view of the whole price situation.

FIXED PRODUCER PRICES.

The sphere of activity of the price fixing committee is especially well defined with respect to the kinds of prices which it undertook to fix. There is a vast difference in the complexity of problems arising in the fixing of prices for the producer and in fixing those for the retailer, or in fixing those for the wholesaler, distributor, and middleman of all sorts in between. The committee, happily, was not obliged, in the main, to deal with other than the prices at which the producer should sell his materials. The Government usually bought in large quantities direct from the primary source of supply. If the committee, as the war went on, had gone further in the direction of protecting the public, it is doubtful whether they would have found it sufficient to fix prices at the primary distributing points. That scheme, though highly extended by the requirement of a like price for the Allies and public, gave no real protection from high retail prices to the consumer. In no other respect was the sphere of activity of the price fixing committee so narrow as in the stage at which transactions were controlled.²

(4) THE CHARACTER OF THE PRICE-FIXING AGREEMENTS.

The price-fixing committee, in the strict sense of the term, fixed no prices. A perusal of the various terms of the so-called fixed-price announcements and the minutes of the meetings of the committee shows clearly that the prices fixed represented simply agreements entered into with the industry by the committee.

THE METHOD OF MAKING THE AGREEMENTS.

The price-fixing committee, in part as a measure of expediency and in part because of lack of authority, undertook generally to arrive at a fair price by series of conferences with the trade, rather than through any more high-handed or independent method. A leading member of the committee, Dr. F. W. Taussig, goes so far as to say that—

the prices fixed were in all cases reached by agreement with the representatives of the several industries. In strictness they were agreed prices rather than

¹ Mr. Robert S. Brookings, chairman of the price fixing committee, when asked by certain private interests to fix the price of wool on Apr. 19, 1918, said (p. 63 of minutes of price fixing committee for a conference upon that day), that the price fixing committee "do not feel that it is any part of our function to take initiative; at least we have not," and, when pressed to say whether a price would or would not be fixed on wool he said: "You might ask the President. He is the only man who has any authority to say yes or no on anything. We have nothing to do with it."

² An interesting comment is made upon this point by F. W. Taussig in the article referred to previously.

fixed prices. The agreements were usually reached in cordial cooperation with the producers concerned, and thus were in reality voluntary. There were cases, however, in which they were agreements only in name. The representatives of some industries, though they accepted them, did so virtually under duress. In these cases the committee to all intents and purposes decreed prices and was enabled to impose them, under the form of agreement, by a more or less veiled threat of commandeering, and also by the certainty that public opinion would condemn those who failed to accede.

It was the custom of the committee, once it seemed likely that the necessity for fixing a price had arisen, to call the representatives of the industry to Washington for conference. The committee, after itself going over cost figures prepared for it by the Federal Trade Commission, talked freely with the trade the situation at hand, heard the trade viewpoint, and finally, with them, arrived at a price mutually satisfactory. It was the practice usually on important matters to allow the trade to retire for confidential discussion between members. Similarly the committee usually went into executive session before finally announcing the price agreed upon and reviewing the facts of the agreement. The committee, after dismissing the representatives of the industry, usually submitted the price fixed to the President for his approval and public announcement.

ALL PRICES WERE MAXIMUM PRICES.

✓ It was characteristic of the prices fixed by the price-fixing committee, if indeed not of all prices fixed in this country during the war save those for wheat, pork, and hemp, that no more rigid control was attempted than the fixing of a maximum price. The committee really set limits above which the so-called fixed prices might not rise, but left them to play freely below those points. This distinction, though precisely accurate, is of more importance in theory than in practice, because usually the maximum prices became the actual prices and operated, in the main, as fixed prices.¹ The various Government departments (the Department of War, the Department of Navy, the United States Shipping Board Emergency Fleet Corporation, and the Railroad Administration) were usually guided in their purchases by the fixed maximum prices and paid them without more ado.

FIXED PRICES APPLICABLE ALIKE TO LOW AND HIGH COST PRODUCER.

✓ The prices fixed by the price fixing committee were made applicable alike to sales made by low-cost and high-cost producers. That practice, of course, put decided advantages into the hands of many larger manufacturers and producers who turned out enormous

¹ The instances in which the market sank below the fixed prices, as it did with zinc and lumber, are relatively few. The committee, when such a circumstance occurred, simply reduced the fixed maximum price to a lower level.

quantities of product at relatively low figures and handicapped, in a sense, the smaller high-cost producers. It gave rise to no end of discussion among economists within and outside the Government during war, but no departure from this simple measure of setting a single price for all was ever adopted.¹

The price fixing committee, in a very rough way, attempted to fix a flat price at a point which would, starting from the lowest-cost producer, take in enough of the higher-cost producers to bring out in quantity the approximate production required. It is estimated by Dr. Taussig that the price usually was fixed which would secure four-fifths or nine-tenths of the entire output. When reminded that the inevitable corollary of that procedure was that many low-cost producers would reap large profits, the price fixing committee pointed in answer to the excess profits tax. The chairman of the price fixing committee freely said that what the Government did not get from the low-cost producer through price fixing, it would get in another form through taxation.² The price fixing committee then stuck throughout to its policy of fixing a flat rate for all producers whether having low or high costs.

FIXED PRICES APPLICABLE ALIKE TO GOVERNMENT, ALLIED AND PUBLIC PURCHASES.

Long before the work of the price fixing committee was under way, the President in no unmistakable terms had mapped out the policy that "prices mean the same everywhere" and "we must make the prices to the public the same as the prices to the Government."³ Not a month after the President had determined upon this broad policy, the War Industries Board, in keeping with it, declared that "our Allies shall be charged no more than our own Government has to

¹ A fuller discussion of this problem, from a slightly different standpoint, may be found in a later section discussing the bases for determining upon what price to fix.

² At an executive session of the price fixing committee, held July 8, 1918, a discussion took place to determine to what extent, if any, the excess profits tax should be considered in the fixing of prices. Mr. Brookings submitted a memorandum stating that the price fixing committee was created to stabilize values and prevent extortionately high prices. It was not intended, however, unnecessarily to depress values to a point where there would be little or no excess profits tax. The policy of the committee should be, he believed, so to shape prices that the less efficient or small producer would receive a fair profit, even though that gave the larger and more efficient producer a very liberal profit. It was expected that the new excess profits tax would equalize this discrepancy by taking a larger proportion of the liberal profits earned. In connection with this subject, the probable effects of the new excess profits tax were then discussed, and the chairman was requested to call Mr. Kitchin's attention to the probable influence on production of a very high percentage tax.

³ An address to the mine operators and manufacturers made by the President, July 12, 1917.

pay.”¹ There are instances of prices fixed for the Government alone, prices fixed for single branches of the Government only, and for allied purchases only. But, by and large, the prices fixed by the price fixing committee were applicable alike to the Government, Allies,² and the public.

(5) THE PRICE POLICIES OF THE COMMITTEE.

A search through the voluminous minutes of the price fixing committee for their great underlying policies would yield few quotable passages. A statement of policy here may be implicitly contradicted by another statement there. In the record of most cases, indeed there is no mention of any underlying policy whatever.

There is a striking difference in this respect, between the determinations of the price fixing committee and the Food Administration, though it is perhaps more apparent than real. The former seldom and the latter usually talks about policies, as might be expected from an analysis of the two kinds of control. One would get as far, perhaps, if he accepted literally the statement of Chairman Brookings of the price fixing committee that “we have nothing to say about our own policy, we may change it to-morrow,”³ or that of another member, Dr. Taussig, that “a frankly opportunist policy alone was possible.”⁴ But the price fixing committee, though operating without any deep controlling policies, had in mind certain broad aims which throw some light upon their actions.

It is noteworthy that Mr. Baruch, in calling the committee together for organization, impressed it with a responsibility to guard against “runaway markets” and, too, with the necessity for fixing prices at

¹ This policy was announced by the War Industries Board, Aug. 8, 1917, with but two limitations: That the Allies must henceforth apply the same principle in dealing with their own producers and in selling to us and in selling to each other; and that the arrangement must be limited to war materials.

² The price fixing committee information book, recording a meeting of Aug. 27, 1918, defines its application of fixed prices to allied purchases by the following resolution:

“*Be it resolved*, That where prices are stated to be fixed for the United States Government, the governments associated with it in this war, and the public (or primary civilian sales) the said prices are hereby declared to extend to the Government and civilians of the United States (including civilians of its Territories and insular possessions), and to the following Governments, i. e., Great Britain, France, Italy, Belgium, and Japan;

“*And be it further resolved*, That these maximum prices shall not extend to purchases made by the civilians of the above-mentioned allied nations nor to the Governments or civilians of nations other than those above enumerated.”

³ Minute Book of the Price Fixing Committee, Book 2, Apr. 19, p. 63.

⁴ Dr. Taussig, in his article referred to above, goes on to say: The price fixing committee, whose wide range of operations might make its doings of most general interest to economists, was slowest in developing a general policy; and this probably for the very reason that its scope was wide, its principles of action little prescribed by any legislative or administrative instructions. There was no more than a gradual and tentative approach to any principle of action whatever. This restraint was as wise as that of a court of law which refuses to commit itself on any questions of principle not essential to the case in hand. Had the war continued, and had the regulation of industry lasted longer and extended farther, all sorts of new situations and new problems would have arisen, for whose wise disposal no rule could be laid down in advance.

a point where they would stimulate production.¹ He then delivered to them a plan which the War Industries Board, earlier that day, had set down for the committee to follow in its deliberations but which marked out no single general policy.² The committee, after being called together, plunged at once into the task before them and began to discuss the fixing of a price for Oregon and Washington fir without laying out for themselves any general principles.

It does not appear that the price fixing committee undertook formally to set down for its own guidance any general lines of policy or functions until an executive meeting held July 8, 1918, when Chairman Brookings got approval for the following statement:

First. Where the different purchasing departments of the Government require so large a proportion of any commodity as to produce such scarcity of said commodity as to require price control with a view of avoiding a runaway market, the price fixing committee is expected by conference with the said manufacturers of said commodity to stabilize prices by agreement. Failing to agree, the price fixing committee will fix a price and enforce same through some purchasing department of the Government, using to that end not only the various purchasing enabling acts, but such indirect pressure as priority in fuel, transportation, etc., will permit.

Second. Where a scarcity is produced in part or in whole by limitation of imports, it is the Government's duty through the price fixing committee, and a system of import licenses under control of the War Trade Board, to see that control is secured of said importations through an option reserved in the import licenses so as to prevent a runaway market in said imported commodity.

While prices as above outlined may only be arranged for the Government and those associated with us in the war, they, as a rule, are made for the public as well, and where made for the public, the price paid both by the public and the Government is made the same, and, while it is the custom to make maximum prices only, it is generally understood that unless there is a larger supply than the demand, the maximum prices will by necessity also become the minimum price, and the purchasing departments of the Government are usually expected to pay this price.

Third. While the different purchasing departments of the Government are expected to fix prices on their current purchases where there are no special problems involving a lack of supply, the price fixing committee may, on application, solve any special price-fixing problems, the nature of which would seem to require its jurisdiction, and which are in scale with the time involved.

¹ Minutes of the price fixing committee for Mar. 14, 1918.

² The Council of National Defense, in its announcement of the creation of a price fixing committee made Mar. 19, 1918, gave at least the following pertinent statement relative to the aim of the committee: The object of the price fixing committee is two-fold: First, it will be a separate body, quasi judicial in nature, for the purpose implied in its name, and it will serve this purpose through being made up of men separated so completely from industrial interests that their motives and actions in the determination of prices can be subject to no suspicion of mercenary interest. Prices will not be made until after costs have been passed upon by the Federal Trade Commission. With costs as a basis, the price fixing committee will then consider problems of production and distribution before arriving at its decisions.

The second object to be achieved by the price fixing committee is speed. The committee will sit all the time and will thus eliminate unnecessary delay caused by the consideration of price fixing problems in several different quarters.

Perhaps there was no single aim more desired by the price fixing committee than that brought out succinctly by its Army member, Lieut. Col. Robert H. Montgomery, "to stimulate production by one way or another." That policy was always uppermost in the minds of the committee.

(6) ADMINISTERING COMMITTEE DECISIONS.

The price fixing committee, quite without administrative machinery, left the task of administering controls designated by it and the enforcing of fixed base prices or differentials entirely with the commodity chiefs of the War Industries Board. The commodity chiefs, familiar with the technical problems of the various trades and in touch with the hundreds of war service committees, were in a peculiarly favorable position to enlist a full cooperation from the industry.

(7) THE COMMODITIES FIXED IN PRICE BY THE WAR INDUSTRIES BOARD AND THE PRICE FIXING COMMITTEE.

It is scarcely feasible to consider separately the commodities fixed in price by the War Industries Board and the price fixing committee, though note should always be made of the special phases of any regulation which each contributed. The controls undertaken by the War Industries Board between September, 1917, and March, 1918, and then transferred to the price fixing committee concerned copper, iron and steel, cement, yellow pine, Douglas fir, zinc, aluminum, hemlock, North Carolina pine, and spruce. The controls initiated by the price fixing committee between March 14 and the close of war concerned hides and skins, wool, munition linters, harness leather, sulphuric acid, nitric acid, cotton textiles, cotton linters, sand and gravel, manila fiber, building tile, sole and belting leather, rags, wool grease, compressing rates for cotton, brick, millwork, and gypsum wall board. The informal controls exercised by the War Industries Board itself independently of the price fixing committee concerned lead, wood chemicals, nitrate of soda, alkalis, nickel, quicksilver, platinum, manganese ore, and burlap.

There follows a discussion of the most important of these controls under the following main commodity headings in the order named: Iron and steel, and their products; copper; aluminum; lead; zinc; nickel; quicksilver; platinum; cotton textiles; cotton linters wool; hides, skins and leather; manila fiber and hemp; burlap; lumber; building materials; and chemicals.

IRON AND STEEL AND THEIR PRODUCTS.

There is scarcely an experience with price-fixing, throughout our whole war period, which is more striking or more important than

that with the iron and steel family.¹ Regulation was invoked within our first six months of war to rescue iron and steel prices from a runaway market. The extraordinary demands of the Allies for war-making steel, and the sudden potential demands of the American Government, combined to squeeze short the civilian supply and start prices skyward. Prices did, in point of fact, attain a peak in July, 1917, without precedent in the epochal year 1899, or in earlier iron and steel history. The Government and everyone saw then a need to do something, and they began considering how best to make the market stable.

An analysis of price control within the iron and steel group, then, entails a comprehension of the runaway market in 1917; the disposition to control iron and steel prices reached both by the Government and the industry; the kinds of problems facing the Government in assuming control; the raw-material prices fixed on September 24, 1917; the semifinished-product prices fixed on October 11, 1917; the finished-product prices fixed on November 5, 1917; and the determination of differentials upon these basic prices.

The runaway steel market in 1917.—A careful study of the war-time prices of the basic raw materials of the iron and steel industry (iron ore, coke, pig iron, scrap steel, steel billets, steel bars, steel shapes, steel plates, steel rails, steel spikes, steel skelp, rivets, cast-iron pipe, steel hoops, steel sheets, tinplate, wire rods, and wire fence), and especially of those most used in making war, shows clearly that iron and steel prices held steadily below their prewar level for a full year after Europe started war. The market then, however, became sensitive and prices, in the main, began soaring. The open market price of Connellsville coke, for example, which is a principal factor in the price of pig iron, jumped from \$1.67 per ton in September, 1915, to \$12.25 in July, 1917, with but two setbacks. The price of basic pig iron itself began rising in June, 1915, when it was selling for \$12.59 per ton, and climbed steadily to \$52.50 per ton in July, 1917. Bessemer steel billets jumped in a straight line from \$19.50 per ton in May, 1915, to \$95 per ton during June and July, 1917. Structural steel shapes rose from 0.012 per pound in December, 1914, to 0.062 per pound in July, 1917. Steel tank plates shot from \$1.22 per hundredweight in July, 1915, to \$9 per hundredweight in July, 1917.²

But even these phenomenal rises are less impressive than the index number constructed to reflect a grand average of the whole steel market. An index number for the iron and steel group, includ-

¹ The control of iron and steel, and their products was begun, and put well under way, by the War Industries Board before the creation of the price fixing committee in March, 1918. The whole subject is treated here, however, for the sake of continuity.

² Quotations from Iron Age of open market prices. The contract prices, which are not available, of course underwent less violent fluctuations.

ing 88 leading iron and steel prices and weighted to assign each commodity its due influence upon the final average, has been prepared to measure the general trend of iron and steel prices away from their prewar level, from January, 1913, to December, 1918. For later reference this index number is here shown for the months subsequent to the peak point in July, 1917, as well as before.¹

WEIGHTED INDEX NUMBERS OF PRICES.

IRON, STEEL, AND THEIR PRODUCTS AND "ALL COMMODITIES."

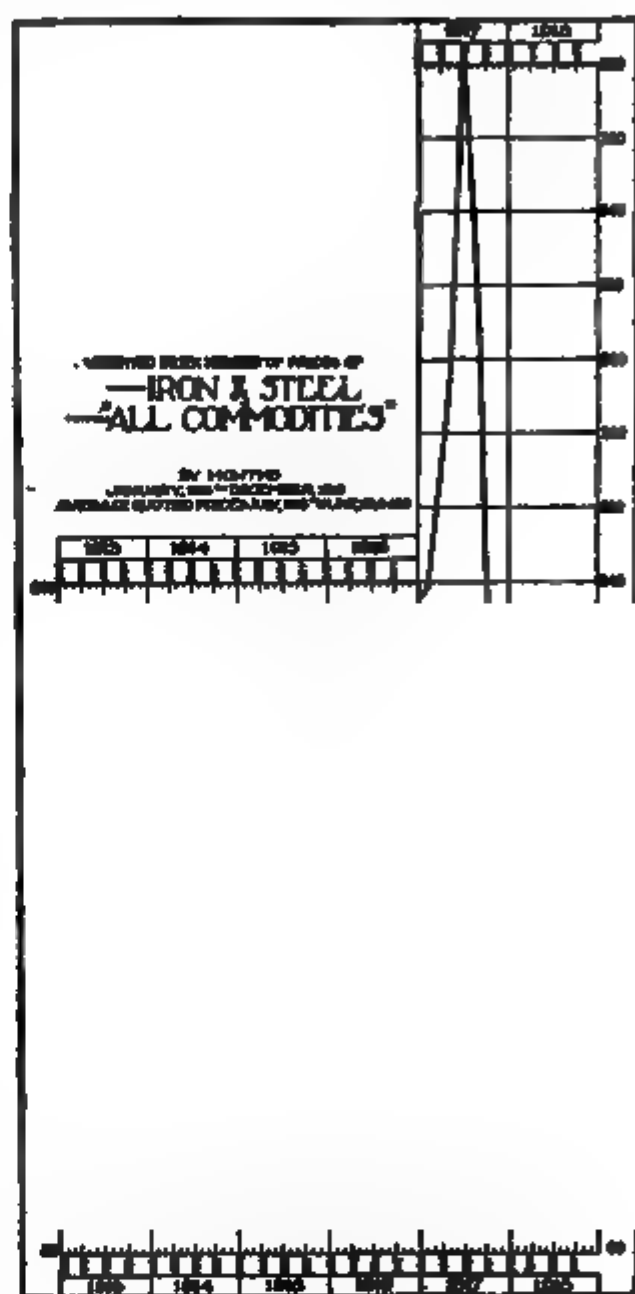
Month.	1913	1914	1915	1916	1917	1918
Iron and steel and their products:						
January.....	121	95	89	138	235	213
February.....	120	98	90	143	238	213
March.....	119	97	90	160	254	213
April.....	116	96	91	164	274	217
May.....	115	93	92	161	294	217
June.....	113	92	93	162	344	213
July.....	112	92	97	164	370	213
August.....	111	93	103	168	346	219
September.....	108	95	108	170	310	219
October.....	104	92	111	175	243	222
November.....	98	90	117	202	218	223
December.....	98	89	131	221	217	217
Quarters:						
First.....	120	97	90	145	242	213
Second.....	114	94	92	162	306	217
Third.....	110	93	103	167	342	219
Fourth.....	99	90	119	198	226	220
Years.....	111	93	101	168	279	213
"All commodities":						
January.....	103	100	100	115	148	135
February.....	102	100	100	118	151	137
March.....	102	99	100	121	156	138
April.....	101	98	100	123	170	131
May.....	100	97	100	123	178	130
June.....	100	97	100	122	183	130
July.....	100	97	102	123	189	133
August.....	101	101	102	125	187	136
September.....	102	101	102	127	186	131
October.....	102	99	104	132	183	131
November.....	102	98	107	141	183	131
December.....	101	98	111	144	182	133
Quarters:						
First.....	102	100	100	118	152	137
Second.....	100	97	100	123	177	130
Third.....	101	100	102	125	187	137
Fourth.....	102	98	107	139	182	133
Years.....	101	99	102	126	175	134

¹ The index number for iron and steel prices is made of the monthly averages from January, 1913, to December, 1918, of 88 separate and more important commodities, ranging from the raw material to finished product state, which make up the iron and steel group. In order not to allow extraordinary rises within less important commodities an undue influence upon the index number, each commodity was weighted, by multiplying each of its monthly prices, by the amount produced in 1917 plus the imports for that year. The aggregates thus found were then turned into relative prices on a prewar base, by accepting arbitrarily as 100 the average aggregate from July, 1913, to June 30, 1914. The index number includes the following commodities of one or more series: Iron ore, coke, pig iron, steel scrap, steel billets, steel bars, iron bars, steel shapes, steel plates, steel rails, steel spikes, rivets, steel skelp, cast-iron pipe, steel hoops, steel sheets, tinplate, wire rod, wire fence, adzes, anvils, augers, axes, braces, butts, calks, chain, chisels, cutlery, files, gimlets, hammers, hinges, hods, hooks, hooks and eyes, knobs, locks, lock sets, nails, pans, pails, planes, punches, rasps, rings and ringers, saws, screws, shaves, shoes, shovels, spoons, springs, staples, swages, tongs, traps, trowels, trucks, turns, vises, washers, wedges, wheelbarrows, wire. See "Prices of iron, steel, and their products," by Walter W. Stewart (War Industries Board Price Bulletin No. 33).

The iron and steel market, according to these comprehensive figures remained safely below its prewar level for a year after war broke out in Europe. It then mounted steadily, without a single noteworthy setback, to the historic peak attained for steel prices in July, 1917, at 270 per cent above the prewar level. That rise was out of all bounds with the point reached by the "all commodities" index number for the same month at 89 per cent above its prewar level.¹ Iron and steel prices, by midsummer of 1917, when the Government began seriously to lay its hand upon them, were literally running away.

The disposition to control iron and steel prices.—The runaway steel market, coming just at a time when the Government was beginning to anticipate extraordinary requirements of steel for war-making purposes, gave alarm to the President, the Congress, and the more sober element of the steel industry. It became obvious that the Government, in order to assure itself and the Allies steel at reasonable prices, would need to take a more radical action than had previously been determined upon.²

The policy of the President and his war officials.—The determined stand made by the President upon price control, in the official statement of July 12, 1917, came just at the time when steel was at its highest point, and affected generally the disposition toward excessive profit taking. It, therefore, hastened steel control. The Presi-



Weighted index numbers of prices.—Iron and steel; and "All Commodities."—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914—100.)

¹The "all commodities" index number, weighted in the same way, represents 1,366 individual commodities within the food, clothing, rubber, paper, fiber, metals, fuels, building materials, and chemicals groups. (See "History of Prices during the War, Summary," by Wesley C. Mitchell, War Industries Board Price Bulletin No. 1.)

²A special board, appointed by the Secretary of War "for the purpose of investigating and reporting upon the feasibility, desirability, and practicability of the Government manufacturing arms, munitions, and equipment," made public their conclusion Jan. 9, 1917, advising a reliance upon private industry.

dent declared unqualifiedly for a "just price" and declared that those—

who do not respond in the spirit of those who have gone to give their lives for us on bloody fields far away, may safely be left to be dealt with by opinion and the law, for the law must of course command these things.

The President added succinctly that—

the Government is about to attempt to determine the prices at which it will ask you henceforth to furnish various supplies which are necessary for the prosecution of the war and various materials which will be needed in the industries by which the war must be sustained. We shall of course try to determine them justly and to the best advantage of the nation as a whole.

It is pertinent that the President, in making his statement, gave assurance that the industries would be sustained at a point of adequate production.

There followed in rapid succession an expression of views regarding price control of iron and steel by various high officials. The Secretary of the Navy said:

There is no justification for a tremendous increase in the cost of basic materials. The Almighty put these things in the ground, and the only additional cost over normal times is in getting them out. Under the law the President is authorized to fix a reasonable price for what is needed for the Government. There is no disposition whatever to cause any hardship to the producers. We are perfectly willing and intend to pay them a fair, even a liberal profit, but we will not pay exorbitant prices, such as are being quoted in some instances.

The Secretary of War, after a conference with steel manufacturers about the middle of July, 1917, declared for a control of iron and steel which would "insure reasonable profits" and determined upon "with reference to the needs of this vital and fundamental industry." The chairman of the Shipping Board was reported to say that in case the steel producers refused to accept the prices fixed on the basis of the proposed cost investigation by the Federal Trade Commission, he favored the commandeering of all steel plants. The chairman of the Senate Committee on Interstate Commerce, whose committee had been charged to inquire into the high prices of certain materials, said that—

it had been demonstrated that competition was powerless to keep the prices of the basic materials at the normal level; that the result of the law of supply and demand had been that an enormous demand had been precipitated upon a limited supply, and thus there was no limit to which the prices might soar.

Meantime a controversy over the prices to be paid by the Government for structural shapes and steel plates arose between the chairman of the United States Shipping Board and the manager of the Emergency Fleet Corporation, which resulted in a request by the President that the Federal Trade Commission inquire into the

costs of producing steel. The manager of the Emergency Fleet Corporation announced on June 16, 1917, that he had agreed provisionally upon a price of 3.75 cents per pound for shapes and 4.25 cents per pound for plates, with the understanding that the committee on raw materials, minerals, and metals of the Council of National Defense would later go into the question of costs and determine an equitable return to the steel men. The chairman of the Shipping Board, on the other hand, declared that these provisional prices were \$30 a ton higher than prices which the Navy Department was paying for the same material, and that he, therefore, would sign no contracts at those figures. The steel makers agreed finally to furnish steel plates at a tentative price of 2.50 cents per pound, pending the determination of a final price. Controversies of this sort, to say nothing of other official opinion as indicated above, were potent factors in persuading the President and the Government to control iron and steel prices.

The Pomerene bill in Congress.—The concern within the Government over the steel situation was not confined alone to the President and his war officials. The Congress, too, became uneasy, and while the rampant steel market was on, Senator Pomerene of Ohio introduced a bill providing for Government control over iron and steel prices. The bill was designed to afford the President the same power over the prices and distribution of iron ore, pig iron, steel, and their products as the food and fuel act (Lever bill) had given him over foods, feeds, and fuel. It should be said that the bill, in some respects, contemplated even further control than that given in the food and fuel act. The bill went so far as to provide that the President should have power, whenever in his judgment it became necessary—

for the efficient prosecution of the war and for the purposes aforesaid, to fix the price of iron ore, iron, steel, and their products wherever and whenever sold, either by producer or dealer, to establish rules for the regulation of and to regulate the method of production, sale, shipment, distribution, apportionment, or storage thereof among dealers and consumers, domestic or foreign.¹

It is noteworthy that the Pomerene bill made the Federal Trade Commission, rather than the Council of National Defense, the agency for exercising the presidential authority over iron and steel prices and gave it an abundance of power to investigate costs.

The Pomerene bill, quite aside from these drastic provisions, gave the President a commandeering power which struck fear in the

¹ A full account of the provisions of the Pomerene bill is given in the *Iron Age* for Aug. 16, 1917; that for Aug. 30, 1917; and an especially illuminating account of the hearing on the bill held Sept. 21, 1917, by the Senate Committee on Interstate Commerce, is found in the *Iron Age* for Sept. 27, 1917.

minds of many producers. The President was authorized, whenever any producer or dealer failed to conform to his stipulated regulations—

to requisition and take over the plant, business, and all appurtenances thereof belonging to such producer or dealer as a going concern, and to operate or cause the same to be operated in such manner and through such agency as he may direct.

The discussion in the Congress of this bill, though it was never made law, aroused the legislators quite as much to the need of iron and steel control as the experience of the Executive and his Cabinet had aroused them.

The attitude of the iron and steel industry.—It is not the least significant of the factors which brought on control of iron and steel prices, that the industry itself came to recognize the need for and to desire control. It is not easy to trace the conversion of the iron and steel trade to an appreciation of the need for Government interference, so gradually did it come. But by midsummer of 1917 the more conservative factions of the steel industry saw only peril ahead unless the Government brought stabilization to the market. By late September virtually the whole industry was disposed to recommend that a formal regulation begin.

No doubt an influence of consequence in changing the attitude of the steel men toward control was their knowledge that the Government was determined upon it. The Iron Age, a leading journal of the industry, foretold Government regulation in its feature editorial as early as June 28, 1917, although it then looked a bit askance at the prospect. It said in part:

Predictions are becoming more and more common that it will become necessary for the Government to regulate prices in the steel industry. The proposal is glibly made, but it involves serious and far-reaching consequences. * * * It is difficult to see how the fixing of maximum prices for this commodity or that could make the conduct of business more orderly.

That same journal less than a month later, July 19, declared:

What is certain is that the fixing of new prices by the Government is at hand * * * the Government is not alone in wanting regulation of steel prices. Many producers and buyers of steel have feared the consequence of the ungoverned upward movement of the past six months.

and still a month later, August 30, it said frankly in another leading editorial on the subject that—

undoubtedly there are commodities the price of which the Government should seek to reduce * * * undoubtedly the war necessitates practices that would not be resorted to in time of peace, but such practices are no better than necessary evils * * * it is no time for some to make inordinate profits and add largely to their wealth, when the total material wealth is increasing less rapidly than usual.

The preceding paragraphs have been extended to some length to show the prevailing attitude toward iron and steel control before it set in. It is of peculiar bearing upon the whole institution of steel control that it came not until after the President, his war officials, the Congress, and the industry itself believed that it ought to come. The Government and the industry, then, were in a state of mind to sit around the same table and determine together what kind of control they wanted and how it should be exercised.

Problems facing the Government in assuming control.—Even though the Government, and subsequently the industry, had made up their minds to a control over iron and steel prices by midsummer of 1917, there were still several important technical questions facing the Government in assuming that control. The Government had then learned neither the technique of price fixing, nor the general policies underlying it. It knew little more at the outset than that in determining upon reasonable prices, it ought not to hamper the production of steel. A host of inquiries made the Government think seriously whether any prices fixed for its own purchases should be made applicable to public purchases; whether Government prices should be extended to the Allies; whether the fixed prices should be determined through a flat rate or a flexible cost-plus profit scale; whether the proposed fixed-price schedule would or not abrogate outstanding contract price agreements; whether the Government, in determining upon prices, should take cognizance of the incidental labor, fuel, and transportation problems; and whether control over the producers would take proper account of the middlemen.

Should control extend to civilian purchase.—The President left little opportunity for officials to disagree among themselves whether the public should be made a party to war prices fixed for Government purchases. The interpretation given by the President in his well-known letter of July 12, left few doubts what attitude the country might expect the Government to take in setting the prices for iron and steel. In it he declared unequivocally that—

We must make the prices to the public the same as prices to the Government. Prices mean the same everywhere now; they mean the efficiency of the Nation whether it is the Government that pays them or not. They mean victory or defeat.

The War Industries Board later in the summer indorsed heartily that expression and thus, too, made clear its determination to follow the President's lead. The problem was settled once for all by opening to the public generally the full advantage of prices fixed by the Government.

Should control extend to allied purchases.—The War Industries Board did not, moreover, hesitate long to extend to the Allies gen-

erously the advantages to be had from price regulation within the iron and steel groups. The earlier policy of the President again dominated the policy of the board in announcing finally that¹—

It is the purpose of the War Industries Board to carry out the policy recently announced by the President * * * that in the purchase of war materials in this country our allies shall be charged no more than our own Government has to pay. * * * But this policy has two important limitations. First, it must be reciprocal. The Allies must henceforth apply the same principle in dealing with their own producers and in selling to us and in selling to each other. Second, the arrangement must be limited to war materials, in order to protect our own industry. We must not allow raw material sold by our producers at prices patriotically conceded to our own Government and its allies for war purposes to be diverted to industry and trade abroad which may come in competition with our own manufacturers and producers.

The decision to extend prices fixed for Government purchases to the allied purchases came with but little more hesitation than that to extend them to public purchases.

Flat rate or cost plus profit scale.—There was not a little disturbance among officials at Washington over the problem whether prices for iron and steel ought to be fixed at a flat rate, applicable alike to high and low cost producers, or determined variously by use of a flexible scale allowing each producer a certain profit above his legitimate costs. The proper basis for determining upon a fixed or maximum price for iron and steel was by no means clear to the Government even when it came to the very threshold of control.

The Federal Trade Commission, for the purpose of helping to solve the problem, had been requested to submit current figures showing the cost of production. But it was not then known whether cost data should be adopted as a basis for price fixing or, if so, what costs. The Federal Trade Commission figures showed nothing so clearly as that there was no uniformity in the costs of various producers. The difference in costs of production was made only the more confusing and complicated by testimony given at the time before the Senate Committee on Interstate Commerce by Joseph E. Davies, of the Federal Trade Commission. It was brought out that there were not only varying costs within each class, but also as between four distinct classes of iron and steel producers based upon their degree of integration. There were, in other words, those owning their own ore, transportation facilities for shipping it, blast furnaces, rolling mills, and works for the manufacture of the finished products; those who bought their ore and coke in whole or part, but controlled the other stages of production; those who purchased their pig iron, but manufactured their own steel; and those who bought their steel ingots and billets and rolled their own plates, shapes, and other products.² The

¹ Iron Age, Aug. 16, 1917.

² Iron Age, Sept. 27, 1917.

commissioner showed that producers within the first of these classes generally have the lowest costs, and that those within the last class, which make up a fair percentage of the total number of producers, have the highest costs.

These data, and others like them, made the Government exceedingly fearful of reducing prices to a strict cost basis, lest, through a scaling down of prices, the production be diminished. It was at one time suggested that there be devised a pooling agreement between producers which would provide that the profits of low-cost producers be shared with those of high-cost producers. The paramount desire of the Government to maintain production of steel at its maximum made it take no chance with too drastic measures. It, therefore, determined to fix the maximum prices by a flat rate and at a point high enough to keep substantially in full operation every mill and blast furnace which contributed appreciably to the country's supply.¹

Should higher contract prices already made be abrogated.—There had been made during the market earlier in 1917 contract agreements for iron and steel at prices much higher than the Government contemplated fixing as a maximum. It was believed that the Government, in fixing prices lower than outstanding contract prices, could not abrogate those contracts. The concern within the Government, however, and the industry over this problem turned chiefly upon the advantages which would accrue to buyers who had not contracted ahead and could, under the fixed-price schedule, buy cheaper steel than had their competitors just two months earlier under contract agreement. This problem resolved itself into a simpler one as time passed because of the moderate policy adopted by the Government and the fair point at which steel prices were put. The Government finally gave the industry full assurance that all past contract obligations should be carried out as agreed upon.²

Should the Government recognize the labor, fuel, and transportation problems.—It is noteworthy that the Government, when it set about controlling steel prices, was confronted at once with the solution of incidental labor, fuel, and transportation problems that had for some time puzzled the industry. The Government found it necessary to take into its deliberations a consideration of these very material factors which help to determine the market price of steel.

Should account be taken of the middlemen.—The concentration of iron and steel production in the hands of relatively few producers made it simpler to control prices at the source than in some other

¹ See article by Abraham Berglund on "Price Fixing in the Iron and Steel Industry," in the *Quarterly Journal of Economics* for August, 1918.

² *Iron Age*, July 19, 1917, p. 142. See also *ibid.*, Oct. 4, 1917, p. 882.

industries. A price may be fixed for a producer, but where the product passes through the hands of the jobber to the ultimate consumer the jobber's interest in the fixed price is that of purchaser and not that of seller. An interesting phase of this problem was the attempt of the American Steel & Wire Co., which controls over half the wire output of the country, to check the upward movement of prices by selling wire nails at \$3.20 per keg when they were quoted at \$4 per keg. Independents in several cases were selling wire nails at \$4, and the jobbing trade began basing its sales to retailers on the \$4 price at mill. Thus in several instances \$4.50, and in Philadelphia \$5, were charged on sales to retailers.

The practices of trade with reference to dealers or jobbers were also phases of the same problem. Furnace coke is not usually sold through dealers, whereas the great bulk of foundry coke is. In fixing the necessary differential between furnace and foundry coke the dealer's compensation should be provided for. Again, a rule applicable to one class of dealers may not be applicable to another class. Foundry coke and steel bars or plates are both sold through dealers, but there is no relation whatever between the dealer in coke and the dealer in steel bars and plate. In the case of the former, business is often done on a brokerage basis, whereas in steel bars there is practically no brokerage business. There is, furthermore, the divergence with reference to price practices. The coke dealer or broker frequently buys at an inside price, or something less than that at which the coke operator would sell directly to a consumer, while the jobber in steel products often pays a higher price than that at which the mill sells direct to the large consumer. It is the usual case in a rising market for mills to sell bars, sheets, etc., for shorter periods to jobbers than to manufacturing consumers. The jobber pays a higher price, but his business is profitable because he furnishes deliveries. The middleman in certain branches of the iron and steel trade is still a problem, and there has been some disposition to criticize the price-fixing policy of the Government in largely ignoring the importance of the jobber and trade practices of the kind referred to. It must be said, however, that over a great part of the industry the middleman does not play anything like so important a rôle as in many other industries, and the problem of regulating prices in intermediate sales has been on the whole relatively simple.¹

Raw-material prices fixed September 24, 1917.—Events foreshadowing a control over iron and steel came fast and thick at the War Industries Board, after the middle of September in 1917. Mr. J. L. Replogle, at the request of the board, on September 14, submitted

¹ The materials for this paragraph on the middlemen (based upon the Iron Age, July 19, 1917, p. 146, and *ibid.*, Oct. 4, 1917, pp. 828, 829), were taken bodily from Mr. Berglund's article.

a report of the iron and steel situation, urging that the steel men be called at once to Washington for a conference, that an immediate step be taken to alleviate the chaotic steel situation, and outlining in more detail the condition peculiarly demanding maximum production of coke, pig iron, sheared plates, shell steel, billets and rounds. It was recommended, furthermore, that there be fixed upon those items prices to take effect "at the earliest possible date."¹

¹The text of Mr. Replogle's report follows:

In compliance with your request, I inclose herewith a memorandum showing my ideas as to prices on various iron and steel products. Whatever prices are determined upon should be put into effect at the earliest possible date, as conditions in the steel line are in an extremely chaotic condition, and I believe many manufacturers in anticipation of what they consider very low prices to be established on steel products, are giving right of way in their mill operations to the more profitable product such as are purchased by the automobile manufacturer who is willing to pay the exorbitant prices asked if he can secure delivery, with the result that too much steel is going into non-essentials and entirely too little into war necessities.

Certain manufacturers * * * have given us every cooperation, while others have shown a very indifferent attitude. Despite the fact that the output of * * * is only about 50 per cent of the total capacity of the country, they have taken approximately 70 per cent of all the orders placed by the United States Government and in many cases the prices were far below their competitors, and in all cases where asked to do so, they have taken orders subject to the Government prices to be established, based on the Federal Trade Commission report as to cost. When prices are established and priority schedules are out, I believe most of the others will fall into line.

Products most essential to war.—The products most essential to the war and on which we must have the maximum production are coke, pig iron, sheared plates, shell steel billets and rounds. I believe on the products most needed that it would be well to establish a stimulating price, as in most cases a steel manufacturer has a finishing capacity far in excess of his ingot capacity, this being due to the fact that in normal times one line or another may be inactive and the demands on other products will be such that he can work up through other lines his entire ingot production.

The situation on the various products is about as follows:

Coke.—The total production of coke in 1916 was approximately 54,000,000 tons, about 35,000,000 tons or 65 per cent of which was Beehive coke and about 19,000,000 or 35 per cent being made in by-product ovens. Owing to the insufficient car supply and shortage of labor, the production of Beehive coke has fallen off in a very serious way during the past five or six months, with the result that the price has gone as high as \$17 at the ovens, as compared to an average price of about \$2.20 during the past 10 years. The Connellsville ovens are now running at the rate of about 70 per cent capacity, and are losing about 20 per cent of their output on account of labor shortage and 10 per cent on account of car service and other causes. Coke will be, I think, the limiting factor in our iron and steel production, although the shortage of iron ore may also be a contributing element.

Iron ore.—On Sept. 1, the shipment to lower lake ports was about 3,000,000 tons less than the same time last year, this being largely due to the late opening of lake navigation and insufficient vessel capacity and more particularly, inadequate car service at lower lake points. This matter is receiving every consideration by the ore committee, but I strongly recommend that the movement to take about 86 vessels from the Great Lakes for use in ocean traffic be dropped, as the boats are badly needed for the ore carrying trade. In order to take them through the Welland Canal and make them serviceable, an enormous amount of labor and money would be necessary to cut them in half and repair them and even after this was done, they would not be suitable for ocean traffic. I understand that of the 86 boats under consideration, 37 of them are packet boats which can be spared. The ore consumption in 1916 was approximately 57,000,000 tons, and the annual capacity now with about 19 new furnaces in blast is about 64,000,000 tons, and if the 86 boats are taken from the lake trade, it would cut their tonnage to the extent of probably 3,500,000 tons annually, which would seriously cripple the industry.

Pig iron.—The output for 1916 was approximately 39,500,000 tons, but the production of iron in the first half of this year was considerably under the previous six months, this being largely due to the shortage of coke and labor. Most of the furnaces make

The War Industries Board, four days later, called its committee¹ into a special meeting and asked for views of the proper method to be followed in fixing the price of steel. The committee reported that they had examined the cost figures found by the Federal Trade Commission on coke, iron ore, pig iron, and steel products. They believed in general, however, that those data really reflected the prevailing condition of a year previous since the materials used during the first half of 1917 had been contracted for then. The committee made recommendations relative to the methods of control and they emphasized certain phases of it which proved later to be vital factors in the whole scheme of iron and steel regulation. It said in part that—

It is our judgment that the question of price fixing may be best approached by considering the individual processes or stages comprising the manufacture of the finished product. Each of these practically constitutes an independent

iron, of course, only for their own use and the average monthly production for sale during the first six months of this year was about 940,000 gross tons. The sales obligations of the various manufacturers on July 21, 1917 were 8,233,130 tons, of which about 250,000 tons were for export largely to Canada, Great Britain, Italy, and Japan. From this you will note that the merchant furnace production of the country is sold up for a little over nine months. There has been a great increase in steel making capacity, but the production of iron has not kept pace with it. A number of our Allies, particularly Italy, are in the market for very heavy tonnages, and I think their necessities are such that they can not be denied.

Plates.—Supplementing my letter of the 30th ultimo, I consider plates about the weakest link in our chain. The total production of sheared and universal plates in 1916, which was a record year, was 3,687,384 tons, of which 1,224,234 tons were universal mill plates not adaptable to any great extent for ship construction. As a matter of fact, the production of sheared plates $\frac{1}{2}$ inch or over was 1,865,642 tons. The sales obligations of the various plate manufacturers as of July 21 last total about 2,300,000 tons and the requirements of the Shipping Board and of the Navy and Army to the end of 1918 will approximate 1,750,000 tons, so that it is plain that we have fully two solid years maximum operation now in sight, without taking into consideration the needs of our allies, which will be very heavy. The British war mission is now trying to secure right of way on a plate specification; the Italian mission informs us that their requirements will also be quite heavy, and Japan wants an enormous tonnage. Of the 425,556 tons of plates for export on the books of the plate manufacturers July 21 last, 292,000 or about 68 per cent were for shipment to Japan, and about 70,000 tons for shipment to Canada. If we continue to permit the export of plates, it is plain that the output of our own ship yards will be restricted. I can not too strongly impress upon you the grave situation in this particular line. There was considerable new plate capacity under serious consideration some months ago; in fact, some of the work on the mills had already been started, when for some reason construction was called off at the time Government prices on plates were discussed by representatives of the Government and the manufacturers.

If the demand for pipes and tubes can be reduced by discouraging building construction and all nonessential work of this character, these skelp mills could be used to very great advantage on ship plates. I think that this is one of the greatest possibilities we have and it must promptly be taken advantage of by some one in authority.

In view of the above conditions, which I consider most serious to our war program, I believe a stimulating price on plates would be advisable to encourage the mills in exerting every possible influence for maximum tonnage from their existing mills, and also to influence new construction.

Projectile steel.—The situation in this line is equally as bad as on plates. The requirements of this Government for the next year will approximate 1,600,000 tons. The British war mission advise us that they have approximately 700,000 tons now on order with various plants in this country which have not yet been delivered, and their requirements will be at least 1,000,000 tons additional. Italy wants about 40,000 tons and Belgium about 28,000 tons, making a total of 3,368,000 tons. I have not yet been able

industry. Many of the operators are engaged in only one of the processes, while a few of the larger companies cover all operations from the raw material to the finished product. As each industry must be allowed a profit to support that particular industry, the integrated companies who cover all processes from raw materials to highly finished products must necessarily receive a profit on each of the processes.

Conditions prevailing in the steel trade for a considerable period made it necessary for all lines of industry using steel products to order their supplies further in advance than would be necessary under normal conditions, and as a consequence these industries have on hand substantial stocks of steel acquired at prices very much higher than any we could recommend as being fair or equitable. To partially meet this situation and avoid demoralizing the many industries that are largely dependent upon steel products, we recommend the establishment of what might be termed an intermediate scale of prices for a period of three months with the expectation of a further reduction at the end of that period.

With that purpose in mind we submit the attached schedule of proposed prices on the raw materials and various products, also showing the approxi-

to get the requirements of France and Russia, but I assume that there will be a tremendous tonnage required by them.

Prior to the war there was comparatively little of this tonnage rolled and there are practically no mills in this country adapted particularly for this character of product, as the ordinary bar mill is designed more particularly for bars of $\frac{1}{2}$ inch to, say, 2 inch diameter, and the shell steel in this country is largely rolled on rail mills and heavy structural mills, and the rolling of this tonnage on these mills displaces a very much heavier tonnage of the products for which the mills were designed.

We have had the greatest difficulty in placing a small requisition for about 30,000 tons for the Ordnance Department, as all the mills are filled up largely on foreign orders. The British, Italian, and Belgian missions are all pushing us for deliveries on their requirements in this line, and to place additional tonnages, which we can not see any possibility of their getting, without a serious shortage in our own requirements. We are giving this subject a lot of detailed study, but we can not see any possible chance of meeting our requirements in this line, unless something is done promptly to prevent the manufacture of the enormous tonnage of steel going into nonessentials.

I believe on the larger shells we will have to go to the steel casting companies, although I understand the War Department is not very favorable to this. This has been done by some of the foreign governments in an emergency, and I believe we will have to come to it here, which will help the situation to some extent, but not greatly.

A very serious complication is the closing of shell factories in Canada, where they have a capacity of 400,000 shells per day, which is considerably in excess of the output in this country. I have talked with three of the Canadian munition manufacturers who state they propose to change their factories to other lines of product, as they can not get additional shell orders from the British Government, which insists that Canada must finance their own requirements in this line, which they state they are unable to do, and according to the terms of the United States Government's loan to Great Britain, this money can only be used for purchases in this country, with the result that they are trying to divert this Canadian business to us. They have been consuming 225,000 tons of shell steel monthly in Canada, about 190,000 tons of which was supplied by the Canadian steel plants, and approximately 35,000 tons imported from this country.

I certainly feel that some arrangement should promptly be made to continue the manufacture of shell steel and finished shells in Canada, and understand that negotiations are now on with this object in view.

Summary.—As previously advised, coke, pig iron, plates, and projectile steel will be the most serious factors in the steel situation. The situation on structural steel, pipe, and tubes, wire products, rails, merchant bars, etc., is approximately as reported in my letter of the 30th ultimo. These lines will all have to be materially curtailed in order to meet the absolute war necessities. I again recommend that the leading steel manufacturers be called to Washington at the earliest possible date for a full discussion of the serious condition, with the hope that immediate action will be taken to improve it, as we can not continue on the present basis without most serious results.

Mr. J. Leonard Replogle, Alex. Legge, and L. L. Summers.

mate market prices at the present time and the amount of the reduction from such prices.

This scale of prices is recommended on the basis of offering a premium on ship plates and shell steel with the object of stimulating production, as the present capacity is inadequate to meet the requirements.

It is evident that to be effective any price regulations must be rigidly enforced. Serious consideration should be given to the question of abrogating contracts which were entered into prior to establishing this suggested schedule of prices. We have asked the Federal Trade Commission to advise the War Industries Board further in regard to these contracts, which must be considered an important factor in the situation as some furnaces have entered into contracts without regard to the price established on coal.

The War Industries Board on September 18, 1917, after hearing the above report in substance, agreed that the prices of ore, coal, coke, transportation, and pig iron should be fixed separately and thus build up a fair price for steel. It was likewise then agreed that should the steel interests not be willing to give their full co-operation because of the prices being fixed, that the War Industries Board would take the steps necessary to assume control over the steel plants.¹

The prices fixed on the great basic raw materials of the iron and steel group, which proved later to have been the basis for all price fixing within that group, were announced by the President on September 24, 1917, but were, in point of fact, fixed by an oral agreement between the War Industries Board and the industry on September 21, 1917. The iron and steel industry of the country, as rep-

¹ A chief concern of the War Industries Board, in fixing the prices of iron and steel, was to maintain production at a maximum. It is therefore of interest to note that on Sept. 18, 1917, the chief of the board's production committee, Mr. S. M. Vauclain, prepared a memorandum stating the production of ore, coke, pig iron, and plates should be stimulated. Mr. Vauclain gave it as his confident belief that the maximum production of the mills would be assured should the Board establish prices substantially in conformity to those recommended by him as follows:

Of course the cost of pig iron must necessarily regulate the price of steel and the price of pig iron naturally depends upon the price of ore and coke. There are four items which should be stimulated so that no question of labor or profit should arise in their production and the minimum price should be named that will secure for the United States the maximum production, as follows: Ore, coke, pig iron, and plates; therefore, I suggest to you the following:

(1) *Ore*.—Ore is now sold at lake ports, at Mesabi, at \$5.05 and at Old Range at \$5.20. Such Cuban, Spanish, and Chilean ore as it is possible to bring in costs about the same at plants along the Atlantic seaboard, therefore it is suggested that the price of \$5 per ton at lake ports should be the price to all for ore.

(2) *Coke*.—There is universal regret among manufacturers that the price of coal has been placed at \$2. It is considered a grave mistake and that \$3 coal would have brought about a maximum production of this much-needed article. Therefore, we should not make the same mistake on coke. The cost of beehive coke is usually practically the cost of two tons of coal plus \$1. It is therefore suggested that the price of coke, without distinction between beehive or by-product, should be, at the Connellsville district, \$6.

(3) *Pig iron*.—At the present time there is at most blast furnaces large quantities of fuel and ore which will make operation safe, which has been purchased at ruling market prices. Therefore, in order to enable the manufacturer to work off this high priced material, I suggest the following rates for pig iron: \$35 per ton from Oct. 1, 1917, to

resented by 65 high officials, met the War Industries Board at Washington about 10 o'clock on the morning of September 21, at the call of the board. The steel men were told that the President had requested the board to ask their opinions as to proper prices to be fixed. An informal discussion took place on the basis of data at hand and in mind and then "the meeting adjourned until 4 p. m. to give the steel interests the opportunity of discussing the proper prices to fix."¹

When the meeting reconvened at 4 p. m. Judge E. H. Gary, speaking for the steel industry, explained to the board that the steel interests had appointed committees covering ore, coke, and pig iron and that those committees would make and explain their recommendations. The suggestions made by these committees were virtually the prices adopted by the board and later announced by the President. It is of especial interest, therefore, to read in detail the specific recommendations formally made to the board by the steel committees, of prices which they considered fair and proper. The minutes of the War Industries Board for that day say:

Ore.—The committee on ore then stated that the ore sold last year for this year's consumption was on a basis of \$5.05 per ton, lower lake port, for non-Bessemer Mesabi ore. They suggested that the same price might be considered fair for the ore to be purchased this fall for consumption from June, 1918, to June, 1919, provided that wages for labor and cost of transportation remained the same. If they did not, a corresponding increase in price should be allowed. They stated that the profits for last year were higher than the average for previous years, but not as high as they have been in certain years of the past.

Jan. 1, 1918; \$32.50 per ton from Jan. 1, 1918, to Apr. 1, 1918; and \$30 per ton thereafter, it having been ascertained that with regulated prices for ore and coke any blast furnace in the United States can produce with a fair profit pig iron at the last-named price. Therefore, at the above prices, I suggest the following schedule:

Item.	Oct. 1, 1917, to Jan. 1, 1918.	Jan. 1, 1918, to Apr. 1, 1918.	There- after.
Pig iron.....	\$35. 00	\$32. 50	\$30. 00
Steel ingots.....	45. 00	42. 50	40. 00
Blooms.....	54. 00	51. 50	49. 00
Billets.....	55. 00	52. 50	50. 00
Slabs.....	55. 00	52. 50	50. 00
Bars.....	65. 00	62. 00	60. 00
Shapes.....	67. 00	64. 50	62. 00
Plates.....	77. 00	74. 50	72. 00
Steel rails (light special).....	65. 00	62. 50	60. 00

In each step the manufacturer's profit has been included. You will note at these prices that the base price of plates will be 3.437, 3.321, and 3.215 per pound. I feel confident that should prices, approximately in conformity with these figures, be established that the maximum production of our mills would be assured. There would also be an incentive for new capital to get into this business, as there would be small chance of making an actual loss and the patriotism of our manufacturers would be more active toward a higher production of steel products, and unless we do have a higher production of steel products the war will be a slow and tedious process.

¹The War Industries Board Minutes for Sept. 21, 1917.

Roughly speaking, they stated that the profit per ton last year was approximately \$1. It was understood that the usual differential obtaining in the trade for higher grades of ore should be considered operative.

Coke.—The committee covering coke stated that they considered a price of \$6.50 per ton ovens for coke should be established. Judge Gary stated that he thought \$6 a ton would allow a sufficient margin; Mr. Schwab confirmed Judge Gary's statement.

Pig iron.—The committee covering pig iron stated that in their opinion \$35 a ton valley for basic iron would permit of 90 per cent of the blast furnaces operating at a profit, and if coke can be established at \$6 ovens, \$30 pig iron is fair. Some exception was taken to this, largely because of the fact that contracts for coke at high prices for future delivery had been placed by many furnaces.

Steel.—Mr. Schwab presented figures showing that if a profit of 15 per cent were allowed, ingots should sell at \$52.25 a gross ton, billets at \$60.30 a gross ton, and plates at \$85.30 a gross ton. The representative of the Lukens Iron & Steel Co. stated that if pig iron were fixed at \$35 per ton, plates would cost him on a basis of \$3.45 per hundred pounds.

The members of the War Industries Board retired from the meeting to permit the steel interests to suggest prices on these commodities, which, in their opinion, would be for the greatest benefit of the Nation.

The board was then waited upon by a special committee appointed by the steel interests, consisting of Judge Gary, Mr. Schwab, and Mr. Dalton, who presented certain figures as being acceptable to the steel interests, whereupon the board informed them that at the earliest opportunity they would wait upon the President relative thereto.

One of the most striking of all the features of the early fixing of iron and steel prices was the informality of it and the reliance of the whole scheme upon a cordiality between the Government and the industry.¹

The fruit of all these confidential meetings came finally to a full public knowledge on September 24, 1917, when the President approved the prices therein determined upon by fixing the following

¹ Judge R. S. Lovett, acting chairman of the War Industries Board, on Sept. 23, 1917 wrote the following letter to Judge E. H. Gary, authorized spokesman for the steel industry:

"This is to confirm the oral agreement between the War Industries Board and yourself and other representatives of the steel industry, arrived at on Sept. 21 and approved by the President, as announced by him on Sept. 24, 1917, fixing the following prices which became effective immediately and are subject to revision Jan. 1, 1918, for the articles mentioned, viz: Iron ore, lower Lake ports basis, \$5.05 per gross ton; coke, Connellsville basis, \$6 per net ton; pig iron, Valley basis, \$33 per gross ton; steel bars, Pittsburgh and Chicago basis, \$2.90 per hundred; steel shapes, Pittsburgh and Chicago basis, \$3 per hundred; and steel plates, Pittsburgh and Chicago basis, \$3.25 per hundred. Also, first, that there should be no reduction in the present rate of wages; second, that the prices above named shall be made to the public and to the nations associated with the United States in the present war with Germany, as well as to the Government of the United States; and, third, that the steel producers represented at the meeting pledge themselves to exert every effort necessary to keep up the production to the maximum of the past so long as the war lasts. Will you or those associated with you in the negotiations referred to please take up promptly or send representatives here to take up with Messrs. Baruch and Lovett the details for working out the placing of orders, the settlement of questions of priority, etc., and other matters necessary for carrying out the arrangement, and oblige?"

basic prices effective immediately and subject to revision January 1, 1918, viz:

Commodity.	Basis.	Price.
Iron ore.....	Lower Lake ports.....	\$5.05 per gross ton.
Coke.....	Connellsville.....	\$6 per net ton.
Pig iron.....		\$33 per gross ton.
Steel bars.....	Pittsburgh-Chicago.....	\$2.90 per 100 pounds.
Shapes.....	do.....	\$3 per 100 pounds.
Plates.....	do.....	\$3.25 per 100 pounds.

It was made a part of the informal oral agreement between the War Industries Board with the steel men, and announced with the above price schedule as a policy by the President, first, that there should be no reduction in the present rate of wages; second, that the prices above named should be made to the public and to the Allies, as well as to the Government; and third, that the steel men pledge themselves to exert every effort necessary to keep up the production to the maximum of the past, so long as the war lasts.¹ The President at the same time directed that measures be taken by the War Industries Board for placing orders and supervising the output of the steel mills in such manner as to facilitate the requirements of the Government and the Allies for war purposes, and the public needs where practicable.

The prices fixed by the War Industries Board did not represent reductions as enormous as many people believed the elaborate Federal Trade Commission inquiries into costs justified. They were, though generally below the historic high-price level of July previous, all materially higher than the average prices prevailing for those same commodities during 1911-1914. The falling off in quoted prices for iron and steel, due in part to the knowledge of forthcoming Government regulation, began immediately after the July market. The prices fixed by the board represented a considerable scaling down from the July prices as is strikingly emphasized by the downward and then level turn of the iron and steel index number earlier in the chapter. Coke was reduced in price from \$12.75 to \$6, pig iron from \$55 to \$33, steel bars from \$4.50 to \$2.90, shapes from \$6 to \$3, and plates from \$9 to \$3.25. It should, of course, be remembered that the very high quotations of July, 1917, were never realized in the majority of contract placements. They represented simply the exorbitant prices which certain sales could command because the bulk of steel was booked up under contract. The real scaling down of prices from the high point of July, 1917, therefore, was actually much

¹ Official Bulletin, Sept. 25, 1917.

less than one might suppose on examining the above figures.¹ It was quite as much the object of the Government to stabilize the market at a point that would effect a maximum of production as to scale down prices from higher levels. There follows a table showing the quoted prices on iron ore, coke, pig iron, steel bars, shapes, and plates as they prevailed during 1911-1914; at their average in July, 1917; and as finally fixed by the Government on September 24, 1917.²

Commodity.	Basis.	Average for years 1911-1914.	Average for July, 1917.	Price fixed by Government, Sept. 24, 1917.
Iron ore (non-Bessemer, 51.50 per cent iron), per gross ton.	Lower lake ports.....	\$3.15	\$5.05	\$5.05
Coke (blast furnace), per net ton.....	Connellsville.....	2.05	13.42	6.00
Pig iron (No. 2, foundry and basic), per gross ton.	Valley and Chicago.....	14.90	52.50	33.00
Steel bars (not including sheet steel and small shapes under 3 inches per pound), per cwt.	Pittsburgh or Chicago...	1.31	4.50	2.90
Shapes, per cwt.....	.....do.....	1.32	4.50	3.00
Plates ($\frac{1}{4}$ inch thick or heavier), per cwt.....	.....do.....	1.32	9.00	3.25

No better basis, for a more detailed inquiry into the comparison of fixed prices with prevailing market quotations, can be had than the monthly prices from 1913 to 1918 of each basic raw material that was fixed on September 24, 1917 (iron ore, coke, pig iron, steel bars, shapes, and plates). The market quotations for Mesabi, non-Bessemer (51½ per cent iron) iron ore at the lower lake ports, which was adopted as the basis in fixing iron ore prices, held an average price of \$3.3083 per gross ton for the year just preceding the outbreak of war (July 1, 1913, to June 30, 1914), and fell as low as \$2.80 the latter part of 1915. But it reached a level of \$5.05 in December, 1916, which it maintained steadily to September, 1917. The War Industries Board, at that time, fixed the price at \$5.05. Connellsville coke, furnace, prompt shipment f. o. b. ovens, which was adopted as the basis for fixing coke prices, was selling for \$1.75 per short ton when war broke out in Europe. During the last quarter of 1916 the market became erratic, and coke prices reached \$9 in December of that year. They remained enormously high during 1917 and in August attained a peak at \$13.42. The War Industries Board in September fixed the price at \$6 per ton. The quotation of pig iron f. o. b. Mahoning or Shenango Valley furnace, was \$13 per

¹ It is aptly pointed out by Mr. Berglund that, though considerable reductions took place before the War Industries Board actually acted upon prices, the reductions made by the new schedule were material even in the market as it existed in September. On Sept. 20, four days before the first publication of fixed prices, basic pig iron at Valley furnaces was quoted by the Iron Age at \$42 per gross ton and No. 2 foundry pig iron, Chicago, at \$54. Soft steel bars, Pittsburgh, were quoted at \$4 per hundredweight and tank plates at \$8 per 100 pounds.

² Made from quotations carried by the Iron Age and "Maximum Prices on Iron and Steel Products," as published by the American Iron and Steel Institute.

gross ton when war broke out in Europe. It began going higher the latter part of 1915 and reached \$52.50 in July, 1917. The War Industries Board fixed the price on September at \$33 per gross ton. The price of steel bars, Pittsburgh, stood at \$1.12 when war began but reached \$4.50 by the middle of 1917. The War Industries Board fixed the price at \$2.90 per hundred pounds in September, 1917. Structural shapes, Pittsburgh (beams and channels, 3-inch to 15-inch) were selling at the same level as steel bars when the war began and reached the same peak by the middle of 1917. The price for shapes was fixed at \$3 per hundred pounds in September, 1917. Steel plates, tank plates at Pittsburgh, were selling at \$1.11 when the war began but rose to \$9 in July, 1917. Their price was fixed at \$3.25 per hundred pounds in September, 1917. There follows a more detailed exhibit of the prices of these articles.

MARKET PRICES, AT WHOLESALE, OF IRON ORE, MESABI NONBESSEMER, 51½ PER CENT, AT LOWER LAKE PORTS.¹

Month.	1913	1914	1915	1916	1917	1918
January.....	\$3.40	\$3.40	\$2.85	\$3.55	\$5.05	\$5.05
February.....	3.40	3.40	2.85	3.55	5.05	5.05
March.....	3.40	3.40	2.85	3.55	5.05	5.05
April.....	3.40	3.40	2.85	3.55	5.05	5.05
May.....	3.40	2.85	2.85	3.55	5.05	5.05
June.....	3.40	2.85	2.85	3.55	5.05	5.05
July.....	3.40	2.85	2.80	3.55	5.05	5.05
August.....	3.40	2.85	2.80	3.55	5.05	5.50
September.....	3.40	2.85	2.80	3.55	5.05	5.50
October.....	3.40	2.85	2.80	3.55	² 5.05	5.75
November.....	3.40	2.85	2.80	3.55	5.05	5.75
December.....	3.40	2.85	2.80	5.05	5.05	5.75

MARKET PRICES, AT WHOLESALE, OF CONNELLSVILLE COKE, FURNACE, PROMPT SHIPMENT, F. O. B. OVENS.²

January.....	\$3.85	\$1.88	\$1.55	\$3.14	\$9.44	\$6.00
February.....	2.60	1.90	1.55	3.41	10.57	6.00
March.....	2.47	1.92	1.53	3.45	9.58	6.00
April.....	2.20	1.90	1.55	2.45	8.00	6.00
May.....	2.15	1.83	1.50	2.34	8.40	6.00
June.....	2.20	1.80	1.50	2.54	11.20	6.00
July.....	2.50	1.75	1.67	2.65	12.32	6.00
August.....	2.50	1.74	1.54	2.75	13.42	6.00
September.....	2.37	1.70	1.66	2.94	11.85	6.00
October.....	2.10	1.65	2.18	5.69	³ 6.00	6.00
November.....	1.88	1.60	2.35	6.91	6.00	6.00
December.....	1.77	1.60	2.85	9.00	6.00	6.00

MARKET PRICES, AT WHOLESALE, OF BASIC PIG IRON, F. O. B. MAHONING OR SHENANGO VALLEY FURNACE.⁴

January.....	\$16.41	\$12.50	\$12.50	\$17.81	\$30.00	\$33.00
February.....	16.30	13.19	12.50	17.69	30.00	33.00
March.....	16.11	13.00	12.50	18.20	32.25	33.00
April.....	15.87	13.00	12.50	18.13	38.75	33.00
May.....	15.15	13.00	12.50	18.00	41.60	33.00
June.....	14.50	13.00	12.59	18.00	48.75	33.00
July.....	14.37	13.00	12.74	18.00	52.50	33.00
August.....	14.06	13.00	14.06	18.00	51.20	33.00
September.....	14.00	13.00	14.75	18.31	42.75	33.00
October.....	13.90	12.81	15.00	19.88	² 33.00	33.00
November.....	13.09	12.48	15.75	25.10	33.00	33.00
December.....	12.71	12.50	17.50	30.00	33.00	33.00

¹ Quotations represent prices per ton and were taken on first of each month from the Iron Trade Review.

² Fixed price.

³ Metal Statistics, published by the American Metal Market and Daily Iron and Steel Report, for 1919, p. 37. Prices are quoted per net ton.

⁴ Prices are per gross ton and were taken from the Iron Age, Jan. 2, 1919, p. 18.

MARKET PRICES, AT WHOLESALE, OF STEEL BARS, PITTSBURGH.¹

Month.	1913	1914	1915	1916	1917	1918
January.....	\$1.40	\$1.20	\$1.10	\$1.87	\$3.00	\$2.90
February.....	1.40	1.22	1.10	2.06	3.00	2.90
March.....	1.40	1.20	1.15	2.36	3.27	2.90
April.....	1.40	1.15	1.20	2.50	3.39	2.90
May.....	1.40	1.14	1.20	2.50	3.64	2.90
June.....	1.40	1.12	1.20	2.50	4.00	2.90
July.....	1.40	1.12	1.27	2.50	4.50	2.90
August.....	1.40	1.18	1.30	2.56	4.50	2.90
September.....	1.40	1.19	1.35	2.60	3.88	2.90
October.....	1.39	1.15	1.43	2.62	* 2.90	2.90
November.....	1.30	1.11	1.63	2.76	2.90	2.90
December.....	1.22	1.05	1.75	2.93	2.90	2.78

MARKET PRICES, AT WHOLESALE, OF STRUCTURAL SHAPES (BEAMS AND CHANNELS) 3-INCH TO 15-INCH, PITTSBURGH.¹

January.....	\$1.50	\$1.20	\$1.10	\$1.87	\$3.11	\$3.00
February.....	1.45	1.25	1.10	2.06	3.25	3.00
March.....	1.45	1.21	1.15	2.36	3.52	3.00
April.....	1.45	1.18	1.20	2.50	3.70	3.00
May.....	1.45	1.15	1.20	2.50	4.00	3.00
June.....	1.45	1.12	1.20	2.50	4.25	3.00
July.....	1.45	1.12	1.25	2.50	4.50	3.00
August.....	1.45	1.18	1.30	2.54	4.50	3.00
September.....	1.40	1.20	1.33	2.60	4.06	3.00
October.....	1.39	1.16	1.44	2.63	* 3.00	3.00
November.....	1.34	1.11	1.63	2.86	3.00	3.00
December.....	1.24	1.05	1.75	3.03	3.00	2.88

MARKET PRICES, AT WHOLESALE, OF STEEL PLATES, TANK, PITTSBURGH.¹

January.....	\$1.50	\$1.20	\$1.10	\$1.90	\$3.61	\$3.25
February.....	1.45	1.21	1.10	2.16	3.75	3.25
March.....	1.45	1.18	1.15	2.53	4.33	3.25
April.....	1.45	1.15	1.20	2.75	4.50	3.25
May.....	1.45	1.14	1.17	2.83	4.50	3.25
June.....	1.45	1.10	1.15	2.90	7.10	3.25
July.....	1.45	1.11	1.22	2.90	9.00	3.25
August.....	1.44	1.18	1.26	2.94	8.96	3.25
September.....	1.40	1.19	1.33	3.00	7.05	3.25
October.....	1.36	1.14	1.42	3.07	* 3.25	3.25
November.....	1.29	1.09	1.63	3.33	3.25	3.25
December.....	1.20	1.05	1.75	3.53	3.25	3.10

¹ Quotations represent prices per hundredweight and were taken from Metal Statistics for 1919.² Fixed price.

Semifinished-product prices fixed October 11, 1917.—The next of the three great initial steps in the fixing of iron and steel prices, following the fixing of raw-material prices on September 24, came scarcely three weeks later when prices were fixed on the intermediate products (blooms, billets, slabs, sheet bars, wire rods, shell bars, and skelp) on October 11, 1917.

There need be no restatement of the method by which the Government and industry arrived at the prices fixed on these semifinished products, since the approach was not unlike that made to the former price fixing of raw materials. It should be said, however, that meantime the old iron and steel committees, formerly representing the industry in the Council of National Defense, went out of

existence and the American Iron and Steel Institute became the formal and authoritative spokesman of the industry to the Government. The steel manufacturers, thus formed into committees under the American Iron and Steel Institute for the purpose of furnishing information to the War Industries Board, had no connection, advisory or otherwise, with the awarding of any contracts.¹ These newly formed institute committees and the Government, immediately after the fixing of prices on iron ore, coke, pig iron, plates, shapes, and bars in September, began conferring among themselves and with each other to determine prices on semi-finished products in line with those just announced on raw materials. They came finally to an agreement, and the War Industries Board submitted the newly determined prices to the President.

The President approved the prices fixed on these more highly manufactured steel products on October 11, and announced the following as maximum prices effective immediately but subject to revision January 1, 1918:

Commodity.	Basis.	Price.
Blooms and billets, 4 by 4 inches and larger.	Pittsburgh-Youngstown.....	\$47.50 per gross ton.
Billets, under 4 by 4 inches.....	do.....	\$51 per gross ton.
Slabs.....	do.....	\$50 per gross ton.
Sheet bars.....	do.....	\$51 per gross ton.
Wire rods.....	Pittsburgh.....	\$57 per gross ton.
Skelp:		
3 to 5 inches.....	do.....	\$3.25 per 100 pounds.
Over 5 to 8 inches.....	do.....	\$3.50 per 100 pounds.
Over 8 to 10 inches.....	do.....	\$3.75 per 100 pounds.
Over 10 inches.....	do.....	\$4 per 100 pounds.
Skelp:		
Grooved.....	do.....	\$2.90 per 100 pounds.
Universal.....	do.....	\$3.15 per 100 pounds.
Sheared.....	do.....	\$3.25 per 100 pounds.

The President announced that he fixed these maximum prices on the assurance of the steel industry that they would equitably adjust the relations of the steel interests to each other, and assist to give the country a maximum of production.

Bessemer steel billets, at Pittsburgh, which were selling at \$19 per gross ton at the close of 1914, sold as high as \$100 in July, 1917, and were fixed at \$47.50 in October.² Bessemer sheet bars, at Pittsburgh, which were selling at \$20 when war began, rose to \$105 in June and July of 1917, and were fixed at \$51 per gross ton in October.³ Bessemer wire rods, at Pittsburgh, which were selling at \$24.50 three years earlier, attained a peak of \$96.25 in July, 1917, and were fixed at \$57 per gross ton in October.⁴ Grooved steel skelp, at

¹ Iron Age, Oct. 4, 1917, p. 832.

² Iron Age, Jan. 2, 1919, p. 18.

³ Metal Statistics for 1919, p. 91.

⁴ Iron Age, Jan. 2, 1919, p. 20.

Pittsburgh, which was selling at \$1.15 in July, 1914, rose to \$6 in July, 1917, and was fixed at \$2.90 per hundred pounds in October,¹

Finished-product prices fixed November 5, 1917.—The last of the initial three steps in price fixing within the iron and steel group came on November 5, 1917, when the President approved an agreement between the War Industries Board and the steel industry, fixing prices on certain finished products (sheets, pipe, cold-rolled steel, scrap, wire, and tin plate). The President fixed these maximum prices at that time, subject to revision January 1, 1918. It is of particular interest that he also announced that the iron and steel manufacturers had agreed "promptly to adjust the maximum prices of all iron and steel products other than those on which prices have been agreed upon to the same general standard as those which have been announced. It is expected that this will be done promptly and consistently in line with the basic, intermediate, and finished products, for which definite maximum prices have been established."² The Government had thus brought under its control the basic raw materials, semifinished products, and finished products of the iron and steel industry.

The basic finished-product prices which were announced November 5 were as follows:

Sheets:	Per 100 pounds.
No. 28 black sheets f. o. b. Pittsburgh.....	\$5. 00
No. 10 blue annealed sheets f. o. b Pittsburgh.....	4. 25
No. 28 galvanized sheets f. o. b. Pittsburgh.....	6. 25
The above prices to apply to both Bessemer and open-hearth grades.	
Pipe: On $\frac{1}{4}$ -inch to 3-inch black steel pipe, discount 52 and 5 and 2 $\frac{1}{4}$ per cent f. o. b. Pittsburgh.	
Cold-rolled steel: Seventeen per cent discount from March 15, 1915, list f. o. b. Pittsburgh.	
Scrap (f. o. b. consuming point):	Per gross ton.
No. 1 heavy melting.....	\$30. 00
Cast-iron borings and machine-shop turnings.....	20. 00
No. 1 railroad wrought.....	35. 00
Wire, plain wire f. o. b. Pittsburgh, per 100 pounds.....	3. 25
Tin plate, coke base, Bessemer, and open hearth f. o. b. Pittsburgh, per 100-pound box.....	7. 75

Black sheets, No. 28 gauge, f. o. b. mill at Pittsburgh, which were selling for \$1.80 when war began, sold for \$8 during July, August, and September, of 1917, and were fixed at \$5 per hundred pounds in November.³ Galvanized sheets, No. 28 gauge, f. o. b. mill at Pittsburgh, which were selling at \$2.75 when war came in Europe, rose to \$10.50 in July, 1917, and were selling at \$8.90 still in October. They

¹ Metal Statistics for 1919, p. 115.

² Official Bulletin, Nov. 6, 1917.

³ Metal Statistics for 1919, p. 131.

were fixed at \$6.25 per hundred pounds in November.¹ Blue annealed sheets, No. 10 gauge, at Pittsburgh, which were selling at \$1.35 at the beginning of war, rose to \$8.25 in July, 1917, and were fixed at \$4.25 per hundred pounds in November.² Heavy melting steel scrap, at Pittsburgh, rose from \$11.75 when war broke out to \$38.75 in July, 1917, and was fixed at \$30 per gross ton in November.³ The average price of plain wire, at Pittsburgh, for 1914 was \$1.40, for 1917 \$3.95, and the price fixed in November, 1917, was \$3.25 per hundred pounds.⁴ Tin plates, at Pittsburgh, were selling at \$3.20 the last of 1914, and rose as high as \$7.50 in March, 1917. They were fixed at \$7.75 per hundred-pound box in November, 1917—the highest price quoted in 18 years, if ever.⁵

The determination of differentials upon basic prices.—It must be borne in mind for emphasis that the President, upon the joint recommendation of the War Industries Board and the iron and steel industry, approved simply the basic raw material prices (iron ore, coke, pig iron, steel bars, shapes, and plates) on September 24; certain basic semifinished-product prices (blooms, billets, slabs, sheet bars, wire rods, shell bars, and skelp) on October 11; and certain finished products (sheets, pipe, cold rolled steel, scrap, wire, and tin-plate) on November 5, 1917. These prices were meant simply to afford a basis for other related controls, and the President went so far, in his statement of the latter date, as to instruct the industry to bring the prices of all iron and steel products into a line with the above announced basic prices. The Government, therefore, left quite to the industry the burden of determining the thousands of differentials figured upon the Government fixed basic prices.⁶

¹ Ibid., p. 133.

² Ibid., p. 127.

³ Ibid., p. 159.

⁴ Ibid., p. 103.

⁵ Ibid., p. 141.

⁶ The full list of differentials figured under the various basic prices announced by the Government, and as published by the American Iron and Steel Institute of 61 Broadway, New York, consumes 150 pages of detailed schedules of "Maximum Prices on Iron and Steel Products" (issued Nov. 15, 1918), and shows control over alloy steel castings; anchors; angles, heavy; angles, light; angle splice bars; automobile sheets; bands; bands, heavy, iron; bands, light, iron; barbed wire; bars, angle splice; bars, concrete reinforcing; bars, forging; bars, iron; bars, rail steel; bars, sheet; bars, shell; bars, steel; basic pig iron; beams, Bessemer ferrosilicon; Bessemer pig iron; beveled edge box iron; billets for seamless tubes; billets, forging; billets, re-rolling; billets, small; black plate, tin mill; black sheets; blast furnace castings; blooms, re-rolling; blooms, forging; blue annealed sheets, boat spikes; boiler castings; boiler tubes; bolsters, bolts; bolts, railroad track; brads; bridge blocks; bulb angles; bulb beams; calks; car and locomotive frames; carbon tool steel; car castings; car wheels; castings, malleable; castings, steel; cast-iron water pipe; cement mill castings; chain; channels, heavy; channels, light; charcoal pig iron; cold rolled and cold drawn steel; cold rolled strip steel; column bases; concrete reinforcing bars; couplers; crane castings; cut nails; cut tacks; electrical sheets; engine castings; ferrosilicon, Bessemer; flats; flats, cold rolled and cold drawn; flats, iron; forging bars; forging ingots; forging steel; formed roofing sheets; foundry pig iron; galvanized sheets; gears; half ovals; half ovals, iron; half rounds; half rounds, iron; hexagons; hexagons, cold rolled and cold drawn; high

In response to the request of the President on November 5, the committee on steel and steel products of the American Iron and Steel Institute, which is a private organization, studied the basic, intermediate, and finished product prices, for which definite maximum prices had been established by the Government and recommended what it considered "fair and reasonable" differentials. It appears that the promulgation of these differentials and their enforcement was left in large part to the American Iron and Steel Institute itself. The committee of the institute recommended these differentials to the industry direct, under dates of November 13, November 20, and December 22, 1917, and January 7, 1918, asking that such prices be adopted as maximum prices to take effect immediately; to apply to the requirements of the Government, the Allies and of domestic consumers. The committee added in its recommendations to the industry of the latter date:¹

That the prices of all iron and steel products, maximum prices for which have not been agreed to with the War Industries Board or recommended by the committee, be promptly adjusted so as to be in line with the basic, intermediate, and finished products for which definite maximum prices have been established. The committee relies upon the patriotism and good faith of the iron and steel industry to accomplish this, and expresses the hope that all connected with the iron and steel industry will cooperate in the proper spirit to this end.

All prices, differentials, and extras recommended by the American Iron and Steel Institute, through its committee on steel and steel

silicon or silvery iron; high-speed tool steel; hoops; horse and mule shoes; horseshoe iron; hot rolled strip steel; ingots, forging; iron bars; iron ore; iron rolls; jaw and gyratory crusher castings; light rails; locomotive castings; long terne sheets; low phosphorus pig iron; malleable castings; mine and industrial car castings; mule shoes; nails, cut; nails, wire; nuts; ore, iron; ovals; ovals, iron; pig iron; pinions; pinions, iron; pinions, steel; pipe, cast-iron water; pipe, steel; plates; propeller wheels; rail or step joint castings; rails, light; rails, re-rolling; railroad track bolts; railroad track spikes; rail steel bars; refractory and brickyard castings; re-rolling rails; rivet rods; rivets; road and mining machinery castings; rods, rivet; rods, wire; rolling mill castings; rolls, iron; rolls, steel; rope, wire; rounds; rounds, cold rolled and cold drawn; rounds, iron; scrap, iron and steel; screws, wood; seamless steel tubes; seamless tubes, billets for; shapes, small; shapes, structural; sheets; sheets, automobile; sheet bars; sheets, black; sheets, blue annealed; sheets, electrical; sheets, formed, roofing; sheets, galvanized; sheets, long terne; sheets, painted and formed; shell bars; shoes, horse and mule; shoes, steel; shoe finders' goods; silvery pig iron; skelp; skelp for boiler tubes; slabs, forging; slabs, re-rolling; small billets; small shapes; spikes, boat; spikes, railroad track; splice joints for light rails; spring steel; spring steel card; squares; squares, cold rolled and cold drawn; squares, iron; steel bands, hoops, and strips; steel bars; steel, carbon tool; steel castings; steel, cold rolled and cold drawn; steel forging; steel, high speed tool; steel, hot rolled strip; steel, pipe; steel, spring; steel tire card; steel, tool; steel works castings; strip steel, cold rolled; strip steel, hot rolled; strip, hot rolled; structural shapes; tacks, cut; tees, heavy; tees, light; terneplate; tie plates, iron; tie plates, steel; tinmill black plate; tinplate; tires; tool steel; track bolts; tubes, boiler; tubes, seamless steel; wire; wire, barbed; wire nails; wire rods; wire rope; wood screws; zeos, heavy.

¹ Maximum Prices on Iron and Steel Products, issued Nov. 15, 1918, by the American Iron and Steel Institute, pp. 10, 11.

products, were given the same application in all policies as those fixed specifically by the War Industries Board or later by the price-fixing committee.

Modifications of original basic prices fixed.—It is noteworthy that the great bulk of basic price fixing of iron and steel during the war was done by the War Industries Board, before the price-fixing committee got started in March, 1918. Of no less significance is it that, though the subsequent changes were enormous in number, there were relatively few important changes ever made in the raw material prices fixed September 24, the intermediate prices fixed October 11, the finished product prices announced November 5, 1917, and the differentials based thereon announced soon afterwards by the American Iron and Steel Institute. Those original prices generally were renewed every three months after considerable discussion between the Government and the industry. There were some modifications, however, which ought to be noted.

The price fixing committee, through the President, announced on March 26, 1918, that the price of basic pig iron would be reduced from \$33 to \$32 per gross ton during April, May, and June, and the maximum price of scrap steel reduced from \$30 to \$29 per gross ton. The well-known meeting of March 20 between the price fixing committee and the industry had turned, in the main, upon a consideration of the price tendency of the schedule due for revision and the period during which it should be in force. The proposed plan to pool the output of producers so that large and small manufacturers alike might secure a reasonable profit, while production was kept at a maximum, did not find favor.¹ The price fixing committee ignored cost sheets showing rapidly rising figures, on the ground that they were based upon abnormal conditions during January and February. The committee also refused to extend the new prices, as was desired by the steel men, to a period of six months rather than three.² It asked that no new contracts, calling for delivery on or after July 1, specify any price unless coupled with a clause making the price subject to revision by any Government agency. The price fixing committee, again on September 24, 1918, just one year after the War Industries Board had originally fixed that price, set the base price of basic pig iron again at \$33 f. o. b. furnace. The base price on No. 2 foundry iron was increased to \$34, and that of standard Bessemer iron at \$35.20 f. o. b. furnace. These increased prices were subject to certain changes from previous practices as regards delivery.³

¹ Iron Age, Mar. 14, 1918, pp. 700, 701, and Mar. 28, 1918, p. 800.

² Quarterly Journal of Economics, August, 1918, by A. Berglund, pp. 615, 616.

³ Maximum Prices on Iron and Steel Products, pp. 12 and 17.

The price fixing committee, on June 21, 1918, increased the base prices of Lake Superior iron ore, delivered to lower lake ports, 45 cents per gross ton after July 1. These increased prices were based upon the advances in rail freight rates effective as of June 25, and the then prevailing lake rates.¹ The committee again announced on September 24 that the base price of Lake Superior iron ore would be increased 25 cents per gross ton after October 1, provided that if either rail or lake rates are increased or decreased that the base prices would be changed accordingly.²

Price control and the relative rise of prices and production.—A summary of the relative prices prevailing at certain significant dates is presented in the following table. The advance in prices caused by the entry of the United States into the war is shown by the rise from April, 1917, to July, 1917. In July the first announcements of a Government price-fixing policy were made, and the October prices show the reductions accomplished through price control. The average of market prices from July 1, 1913, to June 30, 1914, is taken as 100.³

	July, 1915.	April, 1917.	July, 1917.	October, 1918.
Iron ore, Mesabi, non-Bessemer.....	85	153	153	174
Coke, Connellsville, furnace.....	85	352	594	291
Pig iron, basic.....	96	291	394	240
Steel billets, open hearth.....	103	344	436	218
Structural shapes.....	98	260	424	206
Steel plates, tank.....	97	357	714	258
Tin plate, domestic, coke.....	92	233	349	225
Wire rods, Bessemer.....	102	337	382	226

There can not readily be had an accurate statistical comparison of the relative rises of the prices and corresponding production of all groups controlled within the iron and steel industry. The most satisfactory of all the comparisons is that which can be made of the relative rises of the prices of basic pig iron and those of the production of pig iron by months from 1913 to 1918. In the calculation both of the relative prices and the relative production figures, the average price or production figure, respectively, for the prewar year (July 1, 1913 to June 30, 1914) was taken as a base equal to 100. This comparison is the more interesting because pig iron, the basic raw material of the industry, was fixed as early as September 24, 1917, and during the war underwent even less violent rises than many other commodities of the iron and steel group. The base price for the prewar period, adopted as 100 in figuring the relative prices

¹ Maximum Prices of Iron and Steel Products, p. 14.

² Ibid, p. 17.

³ See "Prices of Iron, Steel, and their Products," by Walter W. Stewart (War Industries Board Price Bulletin No. 33).

of pig iron in the table following, was \$13.31, and the base production figure for that same prewar period, also adopted as 100 in the table below, was 2,231,420 gross tons.

RELATIVE PRICES OF PIG IRON, BASIC.

Month.	1913	1914	1915	1916	1917	1918
January.....	123	94	94	134	225	218
February.....	122	99	94	133	225	248
March.....	121	98	94	137	242	248
April.....	119	98	94	136	291	240
May.....	114	98	94	135	312	240
June.....	109	98	95	135	366	240
July.....	108	98	96	135	394	240
August.....	106	98	106	135	384	240
September.....	105	98	111	137	321	240
October.....	104	96	113	149	248	248
November.....	98	94	118	188	248	248
December.....	95	94	131	225	248	248

RELATIVE PRODUCTION OF PIG IRON.

January.....	125	84	72	143	141	108
February.....	116	85	75	138	119	104
March.....	124	105	92	150	146	144
April.....	123	102	95	145	149	147
May.....	126	94	101	151	153	154
June.....	118	86	107	144	147	149
July.....	115	88	115	145	150	153
August.....	114	89	125	144	146	152
September.....	112	84	128	144	140	153
October.....	114	80	140	157	148	156
November.....	100	68	136	148	144	150
December.....	89	68	144	142	129	154

Summary.—The Government undertook few price controls during the whole war more extensive than that which it exercised over the iron and steel industry. The President, after various informal agreements made in conference between the War Industries Board and the steel men, approved their recommendation to fix the prices of the basic raw materials (iron ore, coke, pig iron, steel bars, shapes, and plates) on September 24, 1917; their recommendation to fix the prices of intermediate products (blooms, billets, slabs, sheet bars, wire rods, shell bars, and skelp) on October 11, 1917; and those for certain finished products (sheets, pipe, cold rolled steel, scrap, wire, and tin plate) on November 5, 1917. He, on the latter date, asked the industry itself to adjust the maximum prices of all iron and steel products in line with the basic, intermediate, and finished product prices already fixed. The industry, through the American Iron and Steel Institute, adjusted thousands of prices, differentials, and extras to those bases. The most important part of this price fixing was done under the War Industries Board, before the creation of the price fixing committee.

The index number for the whole iron and steel group in July, 1917, when it became known that the Government probably would fix prices, had reached a peak unknown in iron and steel history.

The weighted "all commodities" index number in the same month stood 89 per cent above its prewar level, while the iron and steel index number showed an advance of 270 per cent. The fall immediately following July, and before formal control began in September, was due in large part to an anticipation of control and must to that extent be credited to the influences of Government regulation. By October, after prices had been fixed, the index number for iron and steel prices had made a straight drop back to a level 143 per cent above the prewar price. In November the index number for the group receded still further to 118 per cent above the prewar level where it remained without an important rise or drop until the armistice was signed.

COPPER.

The first of the metal price controls and, as proved later, one of the most important, was that over electrolytic copper begun formally on September 21, 1917. By comparison with the iron and steel control which followed upon its heels, it was a simple regulation. The Government came ultimately to fix the raw material, intermediate and finished product prices within the iron and steel group, involving thousands of differentials and extras calculated upon basic prices. But throughout the whole war, speaking generally, it did not attempt fixation in the copper group of more than electrolytic copper (refined by the electrolytic process and running 99.93 per cent pure or upward)—the great basic raw material of the industry. The Government was provoked to a control over copper more by a concern for maximum production than from fear of a runaway market. While formal price fixing did not begin until later, during the six months after our entry into the war, the negotiations of the War Industries Board for Government and allied purchases bear upon the price-fixing problem. It is necessary to review these actions before pushing an inquiry into the fixing of the first price in September, 1917, and the increase of price allowed in July, 1918.

Copper production of more concern than high prices.—This country controls the bulk of copper in the world and, by the enormous allied purchases during 1916 and 1917, was made to realize that, if it, too, was to make war, it must maintain maximum copper production. Even before the United States entered the struggle, the European War required the lion share of copper mined in the country. After our entry it was obvious that a normal output of copper would not suffice. There would be required very much more, though nobody knew specifically the quantity. Curiously, copper prices, during the phenomenal steel rise of 1917, were falling. Yet the Government, though interested primarily in encouraging maximum copper production, presently concerned itself with price control because it believed that a means to the greater end in mind.

To make the situation clear, there are presented statistics showing the war-time changes in the prices of electrolytic copper at New York; the production of refined new copper; the stocks on hand; the amount of copper exported; and the apparent domestic consumption of copper.¹

ACTUAL COPPER MOVEMENTS.

Year.	Prices (electro- lytic copper).	Production (total new supply).	Stocks (beginning of year).	Exports.	Domestic consumption (apparent).
	<i>Cents.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1913.....	15.52	1,615,067,782	105,497,683	817,911,424	812,268,639
1914.....	13.32	1,533,781,394	90,386,402	840,080,922	620,445,373
1915.....	17.47	1,634,204,448	173,640,501	681,917,955	1,043,497,328
1916.....	28.46	2,259,387,315	82,429,666	784,006,486	1,429,755,266
1917.....	29.19	2,423,646,171	128,000,000	1,126,082,417	1,316,463,754
1918.....	24.68	2,450,000,000	114,000,000	735,737,200	1,648,262,800

RELATIVE COPPER MOVEMENTS.²

Year.	Prices.	Produc- tion.	Stocks.	Exports.	Domestic consump- tion.
1913.....	100	100	100	100	100
1914.....	85	95	86	103	76
1915.....	113	101	165	83	128
1916.....	183	140	78	96	176
1917.....	188	150	121	138	162
1918.....	159	152	108	90	203

The later considerations in detail of a proper price to allow the producers for their refined copper, and the contrast in the movement of copper prices and steel prices fixed at the same time, require a more minute study of the quotations than the above yearly figures afford. There follows a list of monthly quotations of electrolytic copper at New York, showing prices per pound from 1913 to 1918:³

ELECTROLYTIC COPPER PRICES.

Month.	1913	1914	1915	1916	1917	1918
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
January.....	16.75½	14.45	13.71	24.10	30.26	23.50
February.....	15.27	14.67	14.57	27.46	35.22	23.50
March.....	14.92½	14.33½	14.96	27.44	35.74	23.50
April.....	15.48	14.34	17.09	29.31	32.19	23.50
May.....	15.63	14.13	18.60	29.81	32.32	23.50
June.....	14.85	13.81½	19.71	27.49½	32.57	23.50
July.....	14.57	13.49	19.08	25.60	28.90	25.89
August.....	15.68	12.41½	17.22	27.36½	27.13	26.00
September.....	16.55	12.08½	17.70½	28.26	25.45	26.00
October.....	16.54	11.40	17.86	28.64	23.50	26.00
November.....	15.47	11.74	18.83	32.22½	23.50	26.00
December.....	14.47	12.93	20.35	33.84	23.50	25.28½

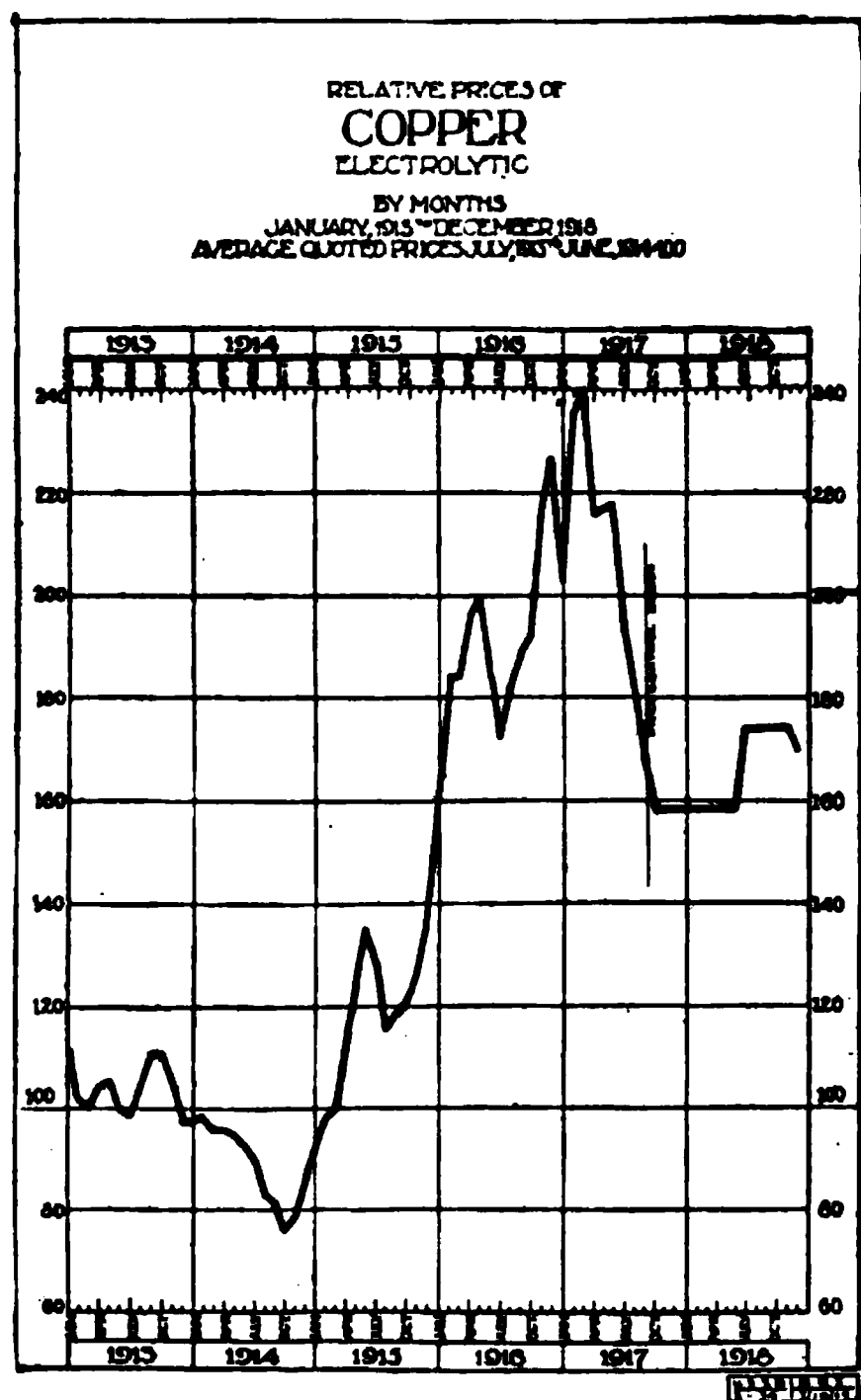
¹ The price table was taken from Metal Statistics for 1919; the tables showing production, stocks on hand, and apparent domestic consumption from the United States Geological Survey; and, finally, that showing exports, from the Bureau of Foreign and Domestic Commerce.

² The relative comparisons were made upon the basis of the actual price, production, stock, export, and consumption figures given above, taking the 1913 figure in each case as equal to 100.

³ Metal Statistics for 1919, p. 231.

⁴ Price fixed.

Electrolytic copper, a month before this country declared war, attained its high price for the whole war period at nearly 36 cents per pound, an increase of 140 per cent over its prewar level. Then, however, it began to drop and continued falling until stabilization was brought to the market through price fixing. It is notable that the peak in the copper market came four months prior to that in the steel market, though formal price fixing took place at the same time.



Relative prices.—Copper, electrolytic.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

contracted for by American consumers, left the refineries bare of supplies. For the last three months after the large September sale, copper averaged 31½ cents. Domestic buyers, because of high prices, had allowed stocks on hand to run low, and then with the continuing advance, hesitated to accumulate supplies. The excessive foreign buying though done with no little care to avoid overturning the market, gave a feverish and speculative market during 1916 and brought about an undeniable threatened world shortage of copper by the beginning of 1917.¹

Clearly, the Government did not start regulating copper to check a runaway market.

The early allied purchases— The most striking feature of the copper situation in 1916, the year just preceding our entrance into war, was the phenomenal increase in production in the United States because of foreign business placed here with manufacturers. The foreign orders were the largest ever known, and sales, with approximate prices were as follows: To Great Britain, December, 1915, 120,000,000 pounds, at 22 cents; to France, March, 1916, 100,000,000 pounds, at 27 cents; and to England and France, September, 1916, 448,000,000 pounds at 27 cents. This total of more than 950,000,000 pounds that the Allies took from the market, together with what was

¹ "The Price Fixing of Copper," by Lewis Kennedy Morse, in the Quarterly Journal of Economics, November, 1918.

It was deemed best, since heavy Government buying must continue, to change the policy of foreign buying in order not to excite the market. While manufactured products, wholly or partly finished, continued to be purchased in record-breaking quantities and at the highest prices, foreign Governments thereafter, instead of taking specified amounts of refined copper, bought only from time to time, and at the best possible price, such copper as could be secured from the large producers.¹ Fewer large sales were featured in the trade news.

The allied purchase of 77,000,000 pounds.—In August of 1917 it was brought officially to the attention of the War Industries Board that the French were in the market for 12,000 tons of copper for August shipment which, together with known immediate British needs, made a total of 60,000,000 pounds.² It was the opinion of the board that the producers should be called into conference, bearing in mind their firm offer to the Government of copper for 25 cents per pound, and that a tentative price of 20 cents per pound be offered them for the above lot. This price, it was agreed in meeting, should be subject to revision upward or downward later.³ It was on the following day moved that if the copper producers refused to enter into this agreement, the Government would proceed to commandeer the necessary supply.⁴ The board, in order to meet the determined opposition in the industry to sales at a memorandum price, modified its initial figure and passed the following resolution:⁵

That as the copper emergency required immediate action necessary to secure a supply for our Government and our allies, the board endeavor to secure from the copper interests the needs of ourselves and our allies at a price to be fixed when we will see the report of the Federal Trade Commission as to the costs and for purposes of payment on account of deliveries, a tentative price of 22½ cents to be fixed with the understanding that this price shall in no way be taken into consideration when the final price is to be determined.

Finally, in the middle of August, the copper interests agreed to deliver 77,000,000 pounds of copper to the Allies on a memorandum, no price to be paid pending the final fixing of a price⁶ after an investigation.

The early Government purchases.—Shortly before this country made its formal declaration of war, and again within three months afterwards, there were placed with the producers two Government orders for copper which affected vitally and hastened the price fix-

¹ Statement from Mr. Lewis Kennedy Morse.

² On Aug. 9, 1917, the board considered still an additional request from the Italian Government for 40,000 tons of copper.

³ War Industries Board Minute Book, Aug. 7, 1917.

⁴ Ibid., Aug. 7, 1917.

⁵ Ibid., Aug. 8, 1917.

⁶ Ibid., Aug. 15 and 16, 1917.

ing of copper. The two orders, embracing altogether 105,510,000 pounds of refined copper, were placed at strangely different prices because of instability in the market. The price for the earlier order was 6.83 cents below that finally fixed in September and that for the later order 1.50 cents above. The fact that the Government had been able to negotiate a large purchase in the spring of 1917 at a price so favorable, gave it a lever to hold firmly for a favorable price in September, just as the second purchase at a higher figure in the summer of 1917 gave the industry a weapon in their holding out for a higher fixed price. Each purchase had its influence upon copper price fixing.

The Government purchase of 45,510,000 pounds in March, 1917.—The principal copper producers of the country, it was announced on March 20, 1917, offered to supply the Army and Navy with 45,510,000 pounds of copper at a price of 16.6739 cents a pound for delivery beginning in April and continuing quarterly for a year. This unusually favorable purchase, negotiated by Mr. Bernard M. Baruch then of the Council of National Defense, was made at a time when the regular market quotations were 35.74 cents per pound and sales were being made at 37 cents in the open market. The amount of that metal which was to go to the Navy was 20,000,000 pounds and that to the Army 25,510,000 pounds.¹ The purchase price agreed upon represented, not the price which those amounts might have commanded in the market, but the actual average selling price covering the 10-year period from 1907 to 1916, inclusive.²

The Government purchase of 60,000,000 pounds in June, 1917.—Another, and larger, order for 60,000,000 pounds of copper, as announced June 27, 1917, was placed by the Government for early delivery at a tentative price of 25 cents a pound. The open copper

¹ The Commercial and Financial Chronicle, Mar. 24, 1917, p. 1108.

² Mr. Bernard M. Baruch, after spending a week in conference with the large producing and smelting interests of the country, received the following letter from them on Mar. 24, 1917, as their written record of the agreement reached:

"Referring to our several conversations on the subject of supplying copper for the Army and Navy, to the letter of the Secretary of the Navy of Mar. 16, and the telegram of the Secretary of War of Mar. 18, both addressed to you, on behalf of the principal producers of copper in this country, we beg to say that we will furnish the quantity named for delivery within twelve months, viz:

"Twenty million pounds for the Navy and 25,510,000 pounds for the Army, in approximately equal quantities each quarter from April, 1917, to April, 1918, at a price of 16.6739 cents per pound, delivered in regular shapes at Atlantic seaboard points.

"The price named is the actual average selling price obtained by the United Metals Selling Co., the largest seller of copper, over the period of 10 years, 1907 to 1916, inclusive, and represents in our opinion the fair average price of all copper sold by American producers during that time.

"We offer the copper at this price notwithstanding our costs for labor, materials, supplies, etc., vary from 30 to 75 per cent above the average during the 10-year period, because we believe it to be our duty to furnish the requirements of the Government in preparing the nation for war with no profit more than we received from our regular production in normal times. It is understood that the price quoted above is for the quantity and period of delivery above named."

market, standing at the time at 32.57 cents per pound, was not secure, largely by reason of actual and threatened labor troubles. The price set was made tentative, subject to revision later when a Government price might be fixed.¹ Secretary of the Navy Daniels shortly afterwards announced that he would agree to pay 75 per cent of the above set price (25 cents), or 18.75 cents per pound, for the Government's order of 60,000,000 pounds, leaving 25 per cent per pound for adjustment when the cost of production shall have been determined by the Federal Trade Commission. The announcement of this policy, which was interpreted by some as an indication of what price the Government intended to fix, gave concern in some market quarters.²

The War Industries Board agreed to advance 22.50 cents and to leave the difference between 22.50 and 25 cents to the findings of the Federal Trade Commission. The indebtedness of the Government to producers soon ran into millions of dollars, and refineries were short of blister and running at from 60 per cent to 75 per cent capacity.³

Meantime, our entrance into war and the increasing copper requirements found the market with scarcely enough copper to meet contract needs, even by calling existing stocks into use, watching supplies, and carefully conserving every pound of copper. Every pound of copper had to be allotted by a careful matching of output with consumers' needs, and where some particular brand of copper was required by the Government, existing contracts were released. Such were the abnormal and almost panicky conditions in the fall of 1917, requiring

¹ Commercial and Financial Chronicle, June 30, 1917, p. 2603.

² The Boston News Bureau, July 13, 1917, said in part:

"At this writing it is not known whether the copper producers will accept—without further parleys—the offer of Secretary Daniels to purchase 60,000,000 pounds of copper at what is equivalent of 18½ cents (75 per cent of 25 cents), with adjustment later on of 6½ cents (25 per cent of 25 cents), which is the balance of the 25-cent figure named by the producers.

"Any price less than 25 cents would involve serious labor controversies, and just now labor is demanding more than it had already agreed to accept on the sliding scale basis—and has tied up the copper producing industry of Arizona, the biggest producing section of the country, in order to force its demands."

The Wall Street Journal of the same date, said in part:

"Small copper sellers have lowered prices for all deliveries. They are quoting July at 29½ cents a pound; August, 29; September, 28½; October-November-December, 27½. This represents a reduction of one-half to 1 cent a pound. However, little business is being transacted. Inquiries are light, and leading producers show little inclination to quote September and last-quarter deliveries until the strike situation clears.

"Washington's action in naming what appears to be a tentative price of 18½ cents a pound, covering the 60,000,000-pound lot which was booked last week, leaving the remaining 6½ cents a pound subject to adjustment by the Federal Trade Commission, has not helped the copper situation.

"It is pointed out that the miners are being paid on the basis of 30-cent copper, and that the average wage scale in June was \$5.85. In view of unsettled labor conditions, prevailing high costs, and the predicted falling off both in mine and refinery output, producers contend that they should at least receive a flat price of 25 cents a pound."

³ "The prices of Ferroalloys, Nonferrous and Rare Metals," by H. R. Aldrich and Jacob Schmuckler, W. I. B. Price Bulletin No. 34.

supervision and ordered control by the Government agencies in cooperation with the copper producers committee.¹

Electrolytic copper fixed on September 21, 1917.—The story of how copper came finally to be fixed at 23.50 cents on September 21, 1917, is not really a complete one, unless preceded by a mention of the not widely-known decisions reached earlier by the War Industries Board to fix it at a lower figure and the storm of protest made to the Government by the copper interests. The original formal fixing of a copper price, made early in September but not announced, the meeting of the War Industries Board with the copper men immediately afterward to discuss in more detail the copper problem, the fixing of a final price the latter part of September, and the interpretation put upon its own action by the board are all essential parts of the story.

The determination of the Government to fix the price at 22 cents.—The War Industries Board met September 5, 1917, and, after discussing the report upon costs of producing copper made by the Federal Trade Commission, reached a definite conclusion to fix copper at 22 cents per pound. To that end it passed the following formal resolution:²

Upon motion duly made, seconded, and unanimously adopted, it was decided to recommend to the President, in accordance with his instructions to Mr. Baruch, that a price of 22 cents per pound f. o. b. New York be offered the copper producers for the United States Government requirements of copper. Mr. Baruch was asked to notify the President that the board is now ready to confer with him on this subject.

The copper interests ask for a price of 25 cents.—The copper interests, in order that they might be made aware of the attitude of the board, were called to Washington on September 11, and told that the board felt that 22 cents per pound f. o. b. New York for refined copper was a fair price and would allow the producers a reasonable profit. The price, they were told, would hold for a certain period only and could then be revised upward or downward. The board told the producers, too, that that price had been determined upon as one applicable alike to the Government and its Allies, and that wages to labor should remain the same notwithstanding the sliding-scale agreement.

Mr. John D. Ryan, in person, then and by a long written memorandum three days later, represented the viewpoint of the copper interests to the Government through the War Industries Board.³

¹ The copper producers committee, while not responsible for fixing prices in the sense that the American Iron and Steel Institute was, did assume responsibility for the allocations.

² This minute was taken from the War Industries Board Minute Book, for Sept. 5, 1917.

³ See War Industries Board Minute Book for Sept. 11, 1917; also a letter from Mr. John D. Ryan, representing the copper interests, addressed to the War Industries Board on Sept. 14, 1917.

He said flatly that the copper interests could not control the price to the public at a point much below 25 cents, and that if the Government fixed 22 cents as the price, then the small high-cost producers would not voluntarily cooperate in selling at the fixed price. There would result, he contended, even more acute labor troubles should the then existing sliding scale of rates be disturbed. These points, after emphasizing the impracticability of the Government commandeering the numerous small high-cost mines, he dealt upon in more detail.

Mr. Ryan and his associates, in proof of these arguments, gave evidence to show that if 22 cents per pound was finally fixed, it would be impossible to obtain the cooperation of the majority of mine owners. The copper industry, while its bulk of business was highly concentrated in the hands of a few producers, embraced after all a large number of smaller high-cost producers whose product was needed in the extraordinary emergency. But he assured the board that if it would allow a fixed price of 25 cents per pound, which the industry at large was holding out for, there would be no difficulty in distributing the copper properly and controlling its prices. If the higher price was not allowed, he said, the 300,000,000 pounds produced outside of the United States could not be controlled.¹

Not the most salient of all the reasons advanced by the copper men for a higher price was the intricate bearing which they clearly showed to exist between labor and copper prices. There are indeed few raw materials of which so large a percentage of the cost of production goes to pay wages. It was argued that the wages of all men in the copper industry had been advanced 50 per cent over those prevailing in 1915, and that in the more important western mining camps the wages were determined upon a sliding scale, based on the price of copper.² The labor unrest, while not so manifest in the copper industry until the summer of 1917, had become serious and the producers feared the consequences should the price

¹ It is noteworthy that during the interim between the appearance of the copper men in Washington and the later memorandum from them the War Industries Board had virtually made up its mind to the necessity of fixing a price of 25 cents for copper. The secretary of the War Industries Board, on Sept. 12, 1917, addressed the following letter to the chairman of the raw materials committee:

"This will confirm to you the action of the War Industries Board taken to-day that the Government pay for copper for uses of the United States Government and the allied governments and the consuming public, 25 cents per pound f. o. b. New York.

"It is requested that you arrange a conference with the President to advise him of this decision of the board."

² These sliding scales provide for the minimum wages of \$3.50 per day of eight hours for miners and men employed underground, and \$4.50 for mechanics, with many higher classifications where skilled labor is necessary; the minimum to apply when copper sells below 15 cents per pound, and 25 cents additional per day to every man employed to be paid for each 2-cent advance in the price of copper above 15 cents. The result had been that for over a year wages were based on a price of copper at 27 cents and above, so that miners were receiving \$5 to \$5.25 per day, and all mechanics \$6.25 to \$6.50 per day.

for copper be set at a figure so low as to require a cut in wages or in the laborers' returns under the sliding-scale rule. The producers would, they said, endeavor to pay employees the same wages which they had been receiving during the months preceding based upon a price of 27 cents and over, should the Government fix the price at not lower than 25 cents. Even with the best of fortune, the producers feared then that the closing of mines through strikes would cut short the production of copper between September and January 1, 1918, by 140,000 tons.

The industry made a proposal to the Government, in its contention for a price of 25 cents for copper, which has a peculiar war-time interest, coming early as it did before the Government had got really into the problem of raw-material regulation. It was submitted by Mr. Ryan in his long memorandum of September 14, and was outlined in part as follows:

While some of the low-cost producers will show a large profit at 25 cents, some of the largest and practically all of the small producers can not show more than the usual peace-time profit at that price, and if depletion of mines is considered, their profit would probably be less than in normal times at average prices. We believe that it would be to the interest of the Government to pay 25 cents per pound and to take all of the production of all of the mines of the country at that price, retaining all the copper which is needed for this Government and for its allies, and selling the balance at the same price, or approximately the same price, to the public.

The leading copper producers finally, on September 14, met in New York and decided among themselves to split the difference in price between that set by the Government at 22 cents and that asked by the producers at 25 cents, and accordingly offered their full cooperation if the Government would allow them a fixed price of 23.50 cents. The record of that decision as given to the Government follows:¹

The representatives of the copper producers who attended our conference on Tuesday and Wednesday met in New York to-day at my request, and I recommended to them as a result of my talk with members of your board, looking toward a compromise in the matter of price that would result in obtaining the full assurance of cooperation and effort on the part of the copper producers, which we were all certain at our conference in Washington could not be secured at any price less than 25 cents, that a compromise be agreed upon at 23½ cents per pound. With one exception those present agreed that if your committee would unanimously recommend a price of 23½ cents * * * that we would still be able to get the practical result that we are aiming for, that is, pretty nearly maximum production; therefore I would say that if your committee would agree to 23½ cents we can pledge the copper industry almost as a whole to use every possible means to secure a maximum production and to maintain the present scale of wages, and I am satisfied we can succeed.

¹ Letter to the War Industries Board by John D. Ryan, dated Sept. 14, 1917.

The price fixed at 23½ cents.—Finally, on September 21, 1917, the War Industries Board definitely fixed the price of refined copper, free on board New York, at 23½ cents per pound. The regulation was in the form of an agreement between the Government and the producers and, as approved by the President, was subject to revision after four months. The same price later was continued in effect until June 1, 1918.¹ Under the agreement the copper producers pledged themselves not to reduce wages then paid; to sell their product to the Allies and the general public at the same price as that to be paid by the Government; to exert every effort to maintain maximum production during the war; and to take the necessary measures to prevent copper from falling into the hands of speculators.² The new agreement on copper with the Government was satisfactory to the industry.³

Interpretation of the fixed-price policies.—The copper industry, though immediately pleased with the new price determined upon for copper, began wondering within a week afterwards how the scheme would be administered and temporary confusion was introduced into the market. Neither the Government nor the industry had yet ad-

¹ Meeting of the War Industries Board, Jan. 9, 1918.

² The official announcement by the War Industries Board, on Sept. 21, 1917, of the final fixing of a copper price was as follows:

After investigation by the Federal Trade Commission as to the cost of producing copper, the President has approved an agreement made by the War Industries Board with the copper producers fixing a price of 23½ cents per pound f. o. b. New York, subject to revision after four months. Three important conditions were imposed by the board: First, that the producers would not reduce the wages now being paid; second, that the operators would sell to the Allies and to the public copper at the same price paid by the Government, and take the necessary measures, under the direction of the War Industries Board, for the distribution of the copper to prevent it from falling into the hands of speculators who would increase the price to the public; and, third, that the operators pledge themselves to exert every effort necessary to keep up the production of copper to the maximum of the past, so long as the war lasts.

The War Industries Board felt that the maintenance of the largest production should be assured, and that a reduction in wages should be avoided. The stipulation that present wages shall not be reduced compels the maintenance of the highest wages ever paid in the industry, which without such stipulation would, with a reduction made in the price of copper, be reduced under the sliding scale so long in effect in the copper mines. Within this year copper has sold as high as 36 cents per pound, and the market price would now be higher than it is, had it not been well known for some weeks that the Government would fix the price.

The principal copper producers throughout the country have evinced an admirable spirit, and for weeks have promptly supplied every request of the Government for copper, without waiting decision as to price, and agreeing to accept the price which the Board should ultimately fix. The proper departments of the Government will be asked to take over the mines and plants of any producers who fail to conform to the arrangement and price, if any such there should be.

³ The Wall Street Journal of Sept. 21, 1917, said in part: "The copper trade was mildly surprised at the announcement that the Government's price, as well as that to the public and the Allies, had been fixed at 23½ cents a pound. For some time past they had been led to believe that the price would be in the neighborhood of 22½ cents a pound. The new figure was made known to some of the big producers earlier in the week, but they were pledged to secrecy, and consequently refrained from discussing the matter in advance of an official announcement. The consensus of opinion in the trade is that the new figure is satisfactory."

justed itself to the detail of regulation or was prepared, at a moment's notice, to answer all price-fixing questions as they arose.¹ The trade soon directed inquiries to the board to learn what would be the status of all outstanding contracts with the Allies at higher prices than the fixed price; whether the new announcement would allow that copper be traded in for delivery after January 21, at prices to be arranged by contract, regardless of the Government fixed price; whether the Government contemplated eliminating all trade in copper, except at the fixed price; whether the Government meant that other prices, than those for electrolytic copper as such, be fixed in line with that base price; and whether all bona fide contracts in existence on September 21 were to stand.²

All outstanding contracts between producers and consumers, as matters stood, might, it was understood, be consummated at book prices. That called for the delivery of copper at a price as high as 27 cents a pound. Under the priority agreement, however, the Government had first call, and the Allies second; which, coupled with the existing shortage in supplies of refined copper, made it very difficult for American manufacturers to get copper, except to fill Government orders.³

The board, in response to inquiries regarding the status after January 21, 1918, ruled that all contract sales made for delivery after the expiration of the present fixed price should be made at a price subject to any revision which the board might see fit later to make.

It was made known to the Government shortly after control of copper had set in, that there were a large number of outside dealers and brokers, other than producers, who were still trading and quoting 28.29 and 30 cents for copper. The gradual setting up of a control committee or selling agency, with Government sanction and representation, crowded off many of these dealers who had bought copper direct from mining companies at figures higher than the fixed price and who would, under the new price, be forced to sell at a loss. The board, however, held firmly to its belief that the fixed price should be made applicable to all trading in refined copper.

The board was strongly urged, at least from one quarter, to extend the price fixing of copper by establishing a scale of prices based on

¹ The Wall Street Journal of Sept. 27, 1917, said in part: "A canvass of the larger copper producers in New York discloses great uncertainty in the copper market, notwithstanding price fixing by the Government for the next few months. Both producers and consumers are 'up in the air,' due to lack of details in connection with the carrying out of the proposed plans for handling the copper market, and this condition will continue until Washington furnishes more detailed advices as to what can be done and what should not be attempted under the new order of things.

² A majority of these questions were raised in a letter by Eugene Meyer, jr., dated Oct. 19, 1917, to Mr. Baruch and were answered the same day by the secretary of the War Industries Board.

³ Commercial and Financial Chronicle, Sept. 29, 1917, p. 1264.

modifications, specifications, and shapes, and particularly to issue a scale of prices on scrap copper. It ruled, however, to fix no other prices than those for electrolytic copper.¹

Appeal of small high-cost producers for an increase.—The relative hardship, if any, of the fixed price of 23½ cents was borne not by the larger low-cost but by the small high-cost producers. Complaints from these more numerous and less efficient concerns, however, became more and more serious, since by 1918 it was estimated the Government was taking fully 93 per cent of the total copper supply for the war program. Of this amount the United States was consuming about 49 per cent and the Allies 44 per cent.² The Government then could not afford to ignore the interest of any branch of the copper industry.³ The price-fixing committee, however, after a conference with the copper interests and an examination of cost sheets, decided on May 22, 1918, despite the apparent disadvantage under which certain high-cost producers were operating, that the price of 23½ cents be continued for at least another 75 days, until August 15, 1918. The committee began fearing shortly afterwards, however, that the advance in freight rates and the possibility of an increase in the costs of labor might make it necessary to increase the price before that time.⁴

Electrolytic copper increased to 26 cents on July 2, 1918.—The increased costs of producing copper,⁵ as the price-fixing committee feared, required that relief be given before the expiration of the pending agreement, on August 15. Accordingly, the committee on July 2 increased the price of electrolytic copper from the price of 23½ cents, which had been originally fixed by the War Industries Board nine months before, to 26 cents on July 2, 1918.⁶ The new

¹ Oct. 25, 1917, the board allowed a differential of from 5 to 10 per cent for L. C. L. shipments over the 23½-cent price because of extra handling, in accordance with trade practices.

² The Prices of Ferroalloys, Nonferrous, and Rare Metals, by H. R. Aldrich and Jacob Schmuckler, W. I. B. Price Bulletin No. 34.

³ The Wall Street Journal of Apr. 30, reported that in Boston: "It is believed that at the meeting next month the Government will make a general advance in the price of copper to 24½ cents per pound, this extra cent constituting a basis for settlement between producer and refiner that will be fair to both."

⁴ "This, however, does not take care of the small army of high-cost producers, whose costs have risen in some cases to as high as 30 cents a pound, but who are operating on a reduced scale in order to keep their mines and equipment in good condition and not to demoralize their working organizations. About 15 of these companies, with an aggregate capacity of 75,000,000 pounds annually, have formed a committee and are to present their case at Washington next month."

⁵ Minutes of the price-fixing committee for June 3, 1918.

⁶ The Wall Street Journal of July 3, 1918, said in part: "The biggest factors which apparently influenced the price-fixing committee in its decision were the 25 per cent freight rate increase and the advancing prices for all supplies and equipment. As previously pointed out, the freight charge added at least 1 cent a pound to operating costs. Both items combined have increased costs something like 2½ cents a pound throughout the entire industry."

⁷ The price-fixing committee on June 5, 1918, approved certain additional charges on copper shapes.

agreement was to be subject to revision again on August 15. The maximum Government fixed price of 26 cents per pound for electrolytic copper was continued in effect, from time to time, until the close of war and the lifting of copper control.

Summary.—Before this country undertook a formal price fixing of copper it had helped to negotiate a purchase of 77,000,000 pounds for the Allies on a memorandum agreement that the price be determined later, and had itself purchased one order of 45,510,000 pounds of copper at 16½ cents per pound in March, 1917, and still another of 60,000,000 at a tentative price of 25 cents per pound, which was later lowered. There was a considerable disagreement, when finally the Government came to fix a price between the Government and the producers whether the price should be 22 cents or 25 cents. It was, in point of fact, fixed at the compromise price of 23½ cents on September 21, 1917. Not until July 2, 1918, was that price increased to 26 cents, or in any way modified. The new and higher price, which was necessitated by an increase in freight rates and costs of production, continued in effect until the lifting of copper control after the war.

Copper price fixing, undertaken not to peg prices and to prevent their rising to higher points so much as to assure stable and adequate production, was one of the earliest and most important of the war-time controls. For all of that, it was one of the simplest. Not throughout the whole war period did the Government undertake to exercise widespread price fixing over other than electrolytic copper, the great basic raw material of the industry. Such a simple control, however, was peculiarly possible in the case of copper, since the Government itself took virtually the whole output and was really fixing a price for its own purchases.

ALUMINUM.

The aluminum industry in the United States is concentrated in the hands of a single producer, and the price situation during the war presented no problems especially difficult. The greater part of the metal consumed in this country is bought under long-time contracts, and although the spot market was often beyond control during the war the contract quotations never exceeded reasonable bounds. It was not until the middle of 1915 that the aluminum demands of the Allied Governments, both for industrial uses and the production of "ammonal,"¹ were felt in the United States. When these demands did appear they upset the spot market, and aluminum prices

¹ "Ammonal," which is a mixture of aluminum dust and ammonium nitrate, was used in tremendous quantities by the allied Governments in the manufacture of munitions.

started on an upward course which was equalled during war time by few commodities.¹

When the United States entered the war, aluminum was selling on the open market at about 60 cents, while contract prices ranged around 38 cents. It was evident that our war needs would be very large and almost immediately steps were taken toward providing for our necessary requirements. Indeed, it was but 19 days after the memorable April 6, 1917, when the general munitions board received a letter from the president of the Aluminum Co. of America, in which he offered to provide the United States Government with approximately 2,000,000 pounds of ingots at 27½ cents a pound, a price about 10 cents lower than the current contract figure and less than one-half of the open-market quotation. This offer was accepted, and later extended to cover 8,000,000 pounds to be delivered not later than August of that year. When the time came for the renewal of this contract in September, however, the Aluminum Co. of America appears to have been doubtful whether 27½ cents was a just price. Price-fixing talk had already begun to circulate in the trade, and it was believed by those interested that some definite governmental action would soon follow.²

Accordingly, in September, 1917, the Aluminum Co. of America agreed with the War Industries Board "to accept direct and indirect Government orders at the prevailing contract price" (38 cents) and to refund to the Government any difference which existed between this contract price and any "fixed price" which might be decided upon at a later date.³

Meanwhile, the Federal Trade Commission had been asked to look into the cost records of the Aluminum Co. of America preparatory to the adoption of a definite fixed price on aluminum ingots, and its products. These data were first received by the War Industries Board in early 1918, and on February 28, the War Industries Board

¹ January, 1915, found prices at 19.08 cents or slightly below the prewar average. By April aluminum was selling for 18.88 cents on the open market, a figure which was lower than the contract price. In May the extraordinary rise began and quotations for that month were around 22 cents. The following month saw aluminum selling for 30 cents, while before the year came to an end the open-market price was quoted at 57.73 cents. Thus, a rise of over 190 per cent was experienced within a single year. This rise continued in a more moderate degree through 1916, the highest point being in November, when aluminum sold for 65.12 cents. It has been said "that many concerns took down their aluminum transmission lines during 1915 and 1916 and replaced them by copper wire in order to take advantage of the abnormal market conditions; for with copper at 17 and 18 cents and aluminum at over 50 cents it was possible to make a change with a good profit. See War Industries Board Price Bulletin No. 34, "Ferroalloys, Non-ferrous, and Rare Metals."

² This was especially evident in view of the growing demands of the military forces. It is estimated that the war requirements of the United States called for approximately 63 per cent of the aluminum supply of the country and those of the Allies about 20 per cent. This made a total of over 80 per cent of our supply which was devoted to war needs.

³ It was apparently presumed that any fixed price which might be later adopted would be lower than the current contract price.

recommended a maximum price of 32 cents per pound for aluminum ingots f. o. b. plants of the Aluminum Co. of America.¹ This price was approved by the President on March 2, and was made applicable to all governmental and civilian purchases up to June 1, 1918.

On May 9, the question of extending aluminum prices after June 1 was brought before the price fixing committee. It appears that the producers in order to supply the increasing war needs had been compelled to enlarge their plants, and they felt that the large cost of such additions warranted an addition of 3 cents per pound to the price soon to expire. A compromise was made, however, at 33 cents, or an increase of 1 cent over the old price. On August 20, it was agreed to continue the 33-cent price until March 1, 1919, when it expired by limitation.

LEAD.

Expectation that the Government, after the declaration of war, would enter the market for large amounts of lead gave further stimulus to a market which had been already inflated by strikes, traffic congestion, and large European demand. On July 1, 1917, lead was quoted at 11.17 cents per pound, the highest market price on record. This price, relatively about 80 per cent higher than the market quotation for the preceding January, represented a rise of 160 per cent above the average price for the 12 months preceding the outbreak of war. In April, 1917, lead was not over plentiful and domestic consumers, fearing an even greater stringency after the United States began to purchase her necessary supplies, started to buy large stocks for accumulation. The General Munitions Board in late May, 1917, considered at some length the advisability of commandeering sufficient lead for Army and Navy requirements.² Although the Government needs at that time were relatively small,³ it was believed that in the coming months lead requirements would grow. On June 18, 1917, the General Munitions Board approved an order for 8,000 tons for July delivery, and 25,000 tons for delivery during August, September, and October at 8 cents per pound.⁴

¹ This price was to apply to purchases in lots of 50 tons or more of ingot of 98-97 per cent grade. The same differentials which had formerly been in force were to be continued for the sundry other grades and products.

² See minutes of the General Munitions Board, May 23, 1917.

³ An announcement made in May in an attempt to reorganize the lead market which had gotten out of control was to the effect "that the May and June Government requirements would not exceed 2,500 tons." See "Price of Ferro Alloys, Nonferrous, and Rare Metals," War Industries Board Price Bulletin No. 34, by H. B. Aldrich and Jacob Schmuckler.

⁴ This price it will be noted was 3.67 cents lower than the current market price. It appears that the raw materials committee experienced some difficulty at first in getting its supplies at this figure, and in early July the question as to whether they would secure sufficient lead to meet requirements was a matter of deep concern. They reported to the General Munitions Board on July 12, 1917, that the lead committee had written to some 1,100 lead miners relative to the 8,000 tons of lead which they had agreed to deliver at 8 cents, and that only 40 replies had been received.

This price though considerably lower than the open market price was not to prove as advantageous as it first appeared, for a temporary over-production of lead soon broke the market. Even in July, lead prices began to fall back toward their level of previous months, while August and September witnessed price declines which finally brought market quotations for lead in early October to 6.71 cents. This price, which was 1.39 cents lower than the Government agreed price, made it evident to the purchasing authorities that they were contending against a very unstable market and that further action would have to be taken. The first solution considered was a system of price fixing. A suggestion to that effect was made to the War Industries Board on October 24, 1917, but the lack of sufficient cost data upon lead made that method inexpedient and other means for regulating lead prices were sought after.¹ The method of price regulation finally adopted was to average the prices for each month as they appeared in the Engineering and Mining Journal, and accept the figure thus arrived at as the price to be paid on Government deliveries for each respective month. What really occurred, then, was the inauguration of a contract under which the United States Government agreed to purchase its supplies from the various lead producers at the average current monthly price. The producers on the other hand, agreed to supply the Government at this price with a minimum of 6,000 and a maximum of 12,000 tons of lead each month.

With governmental requirements determined, and the price to be paid for Army and Navy supplies made relatively the same as the open market quotations, it was believed that the element of speculation would disappear and a more stable market restored. But the freight congestion of early 1918 upset all calculations, and with a scarcity of lead bullion at the eastern refineries resulting from an inability to get shipments through from the Middle Western mines, spot market prices started upward. Moreover, the direct and indirect war demands for lead began to increase,² while a strike tied up the output of the country's second largest producer during the greater part of March and April.

The rise which had started early in the year continued and by June it was feared that a recurrence of the market upheaval of the preceding year might come. On June 4, 1918, a lead committee

¹ It was, moreover, the belief of the War Industries Board that price fixing was unnecessary, since there was a large supply of lead in the market and consequently little probability of prices rising back to the inflated levels of the summer months.

² The total direct allotments of lead to the United States Government from July, 1917, to November, 1918, amounted to 150,400 tons. Compared to the total production of the country this shows a direct war consumption of about 20 per cent. A considerable amount, however, was consumed by the Government in the indirect purchase of manufactured articles, and it is estimated that by the middle of 1918 upwards of 60 per cent of the domestic lead production was going into war consumption.

made up of various members of the trade was appointed at the request of the War Industries Board. To this committee was intrusted the distribution of domestic lead, subject to the supervision of the War Industries Board and to them also was virtually left the oversight of market prices. The industry, moreover, was warned to keep prices below excessive levels, and only sufficiently high to produce a supply adequate to meet Government needs. On June 14, the lead producers committee agreed to sell no pig lead at a price exceeding 7.75 cents per pound f. o. b. St. Louis or 8.05 cents New York City; while the Engineering and Mining Journal consented to consider no sales made at a higher figure in computing its monthly average price at St. Louis.

In this way the market price of lead was virtually fixed to all consumers, and although no formal action was taken by the price fixing committee lead prices remained unchanged from July 1, to the signing of the armistice.¹

ZINC.

The zinc industry in 1915 experienced a market situation quite similar to that which characterized aluminum, and from all available evidence it must be concluded that the same forces can be held accountable for both upheavals. In both instances it was the large demand for export purposes which caused the rise in prices. So extraordinary were the requirements of the munitions makers for zinc that regular zinc consumers, such as galvanizers who were accustomed to purchase on contract at market prices, were virtually forced in many cases to shut down their plants.² The demands of the American Army took the form of sheet zinc, which was used chiefly in the manufacture of boxes for packing explosives. In early July, 1917, the committee on raw materials of the general munitions boards³ arranged with the producers for delivery of 10,000,000 pounds of zinc at 12½ cents per pound.⁴ The market price at this time was 19 cents, and it is evident, therefore, that a considerable saving had been realized. Several later purchases were made at prices varying from 12 to 13½ cents, but it was not until early in 1918 that any definite

¹ The final agreement entered into by the Government relative to the determining of the price of lead by average monthly prices at St. Louis, expired on Nov. 30, 1918.

² The price of spelter rose from 4.97 cents in December, 1914, to 22.14 cents in June, 1915, an increase of approximately 350 per cent in six months. This price rise had a far-reaching effect upon production within the industry and the first half of 1915 witnessed the erection of many new smelters as well as the reopening of many coal-burning plants which had been closed.

³ A zinc committee, composed of leading representatives of the industry, was appointed in April, 1917, by the raw materials section of the Council of National Defense. The activities of this committee were advisory in the procurement of supplies and the determination of fair prices to be paid by the Government.

⁴ It is interesting to note at this point that the Navy several days previous had purchased an amount of zinc at 15 cents.

form of price fixing was adopted. In November, 1917, to be sure, the President had asked the War Industries Board to fix the price of zinc to the public and the Government, even though the military requirements were only a small per cent of the total production. But the lack of cost data was here, as in the case of lead, the deterrent factor and the matter was laid aside until further information relative to costs could be collected by the Federal Trade Commission. In January, 1918, the War Industries Board finally took the zinc situation in hand, and after conferring with the members of the industry arrived at a price which they considered fair, both to producers and consumers. This price, based on various cost data, was placed at 12 cents for grade "A" zinc f. o. b. East St. Louis, subject to the usual trade discounts. It was to remain in force for four months and was to become effective as soon as approved by the President. The price of zinc sheets, of which 80 per cent was being consumed for direct and indirect war purposes was also fixed at this time, the figure adopted being 15.6 cents at plant or 16 cents delivered.¹ Similarly, zinc slab prices were also pegged at 14.6 cents at plant. By May the market price of Grade "A" had fallen to 10 and 11 cents, and the question arose as to whether a downward revision should be undertaken by the price fixing committee. The various governmental authorities, however, did not believe that such a policy should be adopted, for they felt that a high maximum price should be maintained so as to keep in operation many of the high cost mines whose product was required by the Army. The 12 cent price was therefore continued until September 1. This figure was also later adopted, in spite of a request for a higher price by the producers, for the three months ending January 1, 1919.

NICKEL.

The World War appears to have had relatively little effect upon the price of nickel and, indeed, it may be said that there were at no time any extraordinary circumstances which demanded price interference by the Government. As in the case of aluminum, nickel pro-

¹ This price was 2.33 cents lower than the current market quotations. It should be added here that not only did the individual producers agree to the above prices, but they also pledged themselves to fulfill certain conditions in respect to the manner in which they would conduct their business. Thus, the following agreement was attested to by the producers:

- It is agreed both by the producers of grade "A" and of plate and sheet zinc that—
1. They will not reduce the wages now being paid.
 2. They will sell to the Allies, to the Government, and to the public at the same price.
 3. They will take the necessary measures under the direction of the War Industries Board for the distribution of zinc to prevent it from falling into the hands of speculators who might increase the price to the public.
 4. They pledge themselves to exert every effort necessary to keep up production and to insure an adequate supply so long as the war lasts.

duction was concentrated in the hands of a single concern and this producer from the very outset was anxious to cooperate with the authorities in charge of raw materials. Thus, on August 15, the nickel interests arranged to supply nickel to the Government at 40 cents per pound, a price which was 20 per cent below the current market quotation and slightly lower than the prewar average. The military demands for nickel, however, were very large, and estimates place the amount devoted to direct and indirect war uses as high as 90 per cent of the total production. Despite the size of these demands, the supply was at no time so short as to cause any serious difficulty. Whatever shortage did exist at various intervals may be attributed to the limited capacity of the rolling mills.

The price of nickel was at no time fixed and the Government secured its requirements under long-time agreements. The Secretary of the Navy on January 4, 1918, asked the War Industries Board to fix a price, but this body at the time did not consider such action advisable. On January 8, 1918, the International Nickel Co., which refines virtually all the nickel produced in the United States, offered to supply the American and allied Governments with their nickel requirements at 35 cents per pound for ingot nickel, 38 cents for shot nickel, and 40 cents for electrolytic nickel. The ingot price, it will be noted, was lower than the price of the previous August, and represented a decrease of 30 per cent from the market price for January.¹ This offer was accepted and the prices specified remained in effect for Government purchases until December 31. One restriction was added to the agreement, however, in May. It appears that the International Nickel Co. was having difficulty at about this time in filling its contracts, and the authorities in charge felt that restrictions should be placed upon the industry. The matter was therefore placed before the price fixing committee, who discussed the fixing of a definite price applicable to all purchases, but took no action relative to prices other than to approve the existing quotations for Government orders. One concession was exacted from the producers. They were compelled to agree to extend no old contracts or make any new future contracts which tied up their production for any period of time without first consulting the price-fixing committee. In this way control over the entire production of nickel was placed in the hands of the price fixing committee, and although no price was ever fixed or agreed to for sales to the public, the price of nickel (excepting, of course, some 10 per cent which did not go into war uses) was kept as completely in check as was the price of any other nonferrous metal dealt with by the price fixing authorities.

¹ The International Nickel Co. further offered to supply monel nickel (two-thirds nickel and one-third copper), which was used in considerable quantities by the Navy, for 32 and 38 cents per pound, depending upon the grade, the former price to be applied to nickel for shot-metal purposes and the latter to finished rolled rods.

QUICKSILVER.

The price of quicksilver, which in 1916 shot to almost eight times its average for the year preceding the outbreak of the war, had receded to a normal level by the time the United States severed relations with the Central Powers.¹ The year 1917, however, witnessed relatively high prices in the quicksilver industry, and the general run of quotations throughout the year was almost 200 per cent higher than the prewar average. In spite of this fact no action was taken by the military authorities relative to the price of quicksilver, since their requirements when compared to the total production of the country were small. The speculative nature of the industry led them to believe that it was but fair to the producers to allow an extra margin of profit for civilian sales. But it soon became evident that a definite agreement ought to be made for Government purchases to stabilize prices and expedite the placing of contracts. The producers were therefore called into council, and they agreed to furnish the Government with quicksilver at \$105 per flask of 75 pounds, delivered at the Mare Island Navy Yard in California or at \$105.75 delivered at the Brooklyn Navy Yard in New York. Moreover, they informally pledged themselves not to allow the market price to go beyond \$130 per flask. The importers also agreed to furnish supplies to the Government at the same figure as had been fixed for the domestic product.²

This agreement which was to expire at the end of 1918 apparently was considered in a very favorable light by the members of the quicksilver industry. This was especially so in view of the fact that the cessation of hostilities threatened the opening of the American market to foreign producers. Accordingly, on November 20, they asked the price fixing committee to continue the agreed Government price after January 1, 1919. Conditions in the opinion of the committee did not, however, warrant any such action, and on December 31 the price agreement with the quicksilver industry came to an end.

TIN.

Although the United States is the largest consumer of tin in the world; as in the case of rubber, nitrates, and several other essentials, it is dependent almost wholly upon foreign sources for its supply. The shipping situation of 1917-18 threatened our supplies of pig tin and as early as May, 1917, it was announced at a meeting of the Gen-

¹The freeing of the American market from the domination of Spanish and Italian imports advanced quicksilver prices to \$283 per flask by February, 1916. Indeed, prices became so high that explosive producers found it almost impossible to fill their orders for foreign countries. It was not until the American contractors had induced the British Government to raise their embargo on quicksilver exports to the United States that a recession in the American market occurred.

²The total quantity of quicksilver taken under this agreement was equal to about 40 per cent of the domestic and imported supply.

eral Munitions Board that there was an actual shortage. Indeed, the supply of tin in the United States continued insufficient throughout the entire period of American belligerency, and the Food Administration at all times was compelled to keep under control the use of tin plate in the canning industry. On October 21, 1917, the War Industries Board, at the request of the food authorities, fixed the price of tin plate at \$7.75 per box, a figure which was about one-half the current market price.¹

Although it was evident from the very beginning that a strict control would have to be exercised, not only over the American supply but also over such tin as was needed by our Allies, it was not until the late summer of 1918 that any definite action was taken toward the pooling of all purchases. The machinery for such a centralization of purchases was an interallied tin executive set up in London to control and direct all purchases of pig tin for the participating countries. Buying agents were appointed in the various producing countries and import licenses into the United States were granted only for such tin as was purchased through these agents. In September, 1918, the American Iron and Steel Institute, at the request of the War Industries Board, assumed charge of the importation and distribution within the United States. This organization then was made the sole consignee for all tin imported into the United States and "was to receive and pay at the source of supply for all tin allocated to the United States by the interallied executive." Such tin, in turn, was to be distributed at cost only to consumers, jobbers, and dealers in the United States, who held purchasing licenses issued by the War Industries Board.²

In December, 1918, the War Industries Board notified the trade that the interallied tin executive had allocated 10,169 tons of tin to the United States, and that this metal would be distributed to those who held War Industries Board licenses at a price of 72½ cents a pound ex dock New York City. These prices were to remain in force during December, 1918, and January, 1919. Regulations were enacted relative to the amount which could be purchased, and the profits of dealers who resold to ultimate consumers were fixed at definite levels.³

The international tin-purchasing agreement was canceled on December 12, 1918, but limitations as to imports were retained until

¹ See Minutes of War Industries Board, Oct. 31, 1917.

² The War Industries Board put the consumers of tin under a license so that whatever supply was available might be distributed for essential uses only. In applying for a license applicants had to state not only how the tin desired was to be used but also when and where it was to be used.

³ Dealers who sold in lots of 5 tons or over were allowed to make sales to consumers or jobbers holding purchasing licenses at a maximum gross profit at 2½ per cent; while those who sold in lots of less than 5 tons were allowed a profit of 5 per cent. Consumers were allowed to purchase only a fixed maximum amount of tin, and this was based on their consumption for the first 10 months of 1918.

the amount allocated to the United States had been distributed. Indeed, the restrictions upon the importation of tin are still in force (July 15, 1919), although the War Trade Board has announced that on August 1 the distribution of the metal will once more become free.¹

PLATINUM.

The necessity of having a sufficient supply of platinum in the United States for war purposes led in July, 1917, to an order by the Secretary of the Treasury to the effect that all platinum which passed into the United States mints should be withheld from commercial uses. But this order did not lead to the accumulation of sufficient supplies and it was followed on February 23, 1918, by a Government requisition which covered the supplies and output of the 14 largest smelting, refining, and manufacturing plants in the country. On May 1 a further requisition order, effective until June 30, was issued, while on July 1, an order which covered the supplies of 90 per cent of the firms doing business in platinum and kindred metals was put into effect for the remainder of 1918. The supplies thus requisitioned were collected at the United States assay office at New York and in the plants of the large refiners, and later allocated to consumers at the order of the War Industries Board.

Since virtually the entire platinum supply was concentrated in the hands of the United States Government, some arrangement was necessary relative to the prices to be paid to original holders of the requisitioned metals. The figure agreed upon which was later made the market price was \$105 per Troy ounce for pure platinum² and this price remained in effect until December 1.

COTTON TEXTILES.

The early need for regulation.—One of the several bodies created as a part of the General Munitions Board to supervise the purchasing of the necessary war materials³ was the committee on supplies, formally appointed in February, 1917, under the chairmanship of Mr. Julius Rosenwald. Among the many commodities with which this committee dealt were cotton and cotton fabrics, great quantities of which were being asked for by the various Government departments. Even in these early days, when there was no definite policy as to the size of the Army, and consequently no idea as to its prospective demands, the question of prices—those of cotton and cotton fabrics

¹ A complete review of the tin situation in the United States during the period 1913 to 1918 will be found in War Industries Board Price Bulletin No. 34, "Ferroalloys, Nonferrous and Rare Metals," by H. R. Aldrich and Jacob Schmuckler.

² The price fixed for pure palladium was \$135 per Troy ounce and for pure iridium \$175 per Troy ounce.

³ See p. 200 of the present volume.

among others—played a significant part in the committee's deliberations. Thus, on April 7, 1917, a complaint was registered at a meeting of the munitions board to the effect that difficulty was being experienced with the producers of raw cotton, and that a meeting would be held with representatives of the industry relative to the fixing of a price.¹ Shortly afterwards² it was—

pointed out that cotton was costing the Government * * * a great deal more than necessary; because of the fact that cotton on which bids were * * * being based was extremely high. * * *

and on the same day the chairman of the munitions board asked for the right to discuss with the chairman of the Council of National Defense the subject of prices, and to state to the chairman that the discussion had led to serious recommendations as to limiting the prices of cotton.³

To assist the committee on supplies, both in the issuance of clearances and priorities and in the coordination of governmental requirements, a cotton goods committee, made up of members of the trade, was appointed in May, 1917. This body undertook to recommend to the cotton trade "fair" prices for a number of fabrics especially needed for the Army and Navy, and these prices served as a guide to government purchasing agents in placing contracts.⁴ This mode of price fixing, though embryonic in form, seems to have been quite successful and the prices recommended by the cotton goods committee were accepted by influential manufacturers. Its activities resulted, no doubt, in considerable saving to the government. But evidence appears that a large part of this saving was realized at the expense of the purchasing public, and while those cotton fabrics used in quantity by the various war agencies were as a whole rising but slightly⁵ the prices of textiles which played little part in military and naval consumption continued a steady upward trend. Thus, for example, the prices of gingham and print cloths,

¹ Minutes of the General Munitions Board for Apr. 7, 1917.

² *Ibid.*, minutes, Apr. 18, 1917.

³ Raw cotton at this time was selling for about 20 cents a pound, a price about 50 per cent higher than the average for the 12 months preceding the outbreak of the war (see table of prices on p. 539), and cotton fabrics in general had reached a level approximately 70 per cent above that of the prewar year. The price of the chief staple cotton product—sheeting—had advanced 80 per cent above the 1913–14 average.

⁴ Among others, cotton duck was an important item, the price of which was fixed. The fair prices recommended on these fabrics are published in W. I. B. Price Bulletin No. 23.

⁵ In several cases such as duck, uniform cloth, etc., the Government price actually fell during the latter half of 1917 (see table below). This may be explained in part by the fact that most of the cotton cloths bought in the early months of the war were purchased in a highly competitive market in which an individual Government department had to meet not only the competition of the purchasing public and the Allies but also the competition of other Government departments. The coordination of purchases which followed the creation of the cotton committee undoubtedly was an important factor which led to the lowering of prices in the several instances when a decrease was noted. The fact remains, however, that in no known instance did the price of those cotton goods, the bulk of which was consumed by the general public, decrease during the last six months of 1917.

in the months July to December, advanced approximately 50 per cent as compared with the prewar level. In the same period, on the other hand, the price of denim, tremendous quantities of which were used by the Army and Navy, rose but 35 per cent as compared to the average level of 1913-14, while standard United States Army duck sold at a price in December, 1917, which, reduced to relative terms on a prewar base, was but 27 per cent higher than that of the preceding July.¹

¹The appended tables depict the price situation in the cotton industry during 1917. The Government prices of the fabrics used in quantities by the United States Army and Navy remained relatively stable. The Army price of hosiery fell quite steadily during the last five months of 1917, while the market price for the consuming public continued to rise, and cotton denim prices paid by the Government were at all times lower than the market prices paid by the general public.

UNIFORM CLOTH, OLIVE DRAB, USED BY ARMY.

[Base price, \$0.125 per yard.]

	1917	1918		1917	1918
January.....		\$0. 2911	October.....	\$0. 3154	\$0. 3551
February.....		. 2878	November.....	. 3218	. 3410
March.....		. 2893	December.....	. 3074	. 3010
April.....		. 2870	Quarters:		
May.....		. 2882	First.....		. 2894
June.....		. 3010	Second.....		. 2921
July.....	\$0. 3297	. 3114	Third.....	. 3216	. 3272
August.....	. 3230	. 3275	Fourth.....	. 3149	. 3324
September.....	. 3121	. 3426	Year.....	. 3182	. 3103

DUCK, SHELTER TENT.

[Base price, \$0.2033.]

January.....	\$0. 2200	\$0. 3200	October.....	\$0. 3200	\$0. 4150
February.....	. 2550	. 3200	November.....	. 3200	. 4150
March.....	. 2550	. 3200	December.....	. 3200	. 4150
April.....	. 2700	. 3200	Quarters:		
May.....	. 2850	. 3200	First.....	. 2433	. 3200
June.....	. 3450	. 3200	Second.....	. 3000	. 3200
July.....	. 3450	. 3200	Third.....	. 3450	. 3517
August.....	. 3450	. 3200	Fourth.....	. 3200	. 4150
September.....	. 3450	. 4150	Year.....	. 3021	. 3517

GINGHAM, 26½-INCH, 57 BY 50, 6.5 YARD.

[Base price, \$0.0609 per yard.]

	1913	1914	1915	1916	1917	1918
January.....	\$0. 0613	\$0. 0613	\$0. 0588	\$0. 0650	\$0. 0838	\$0. 1561
February.....	. 0625	. 0613	. 0588	. 0700	. 0838	. 1713
March.....	. 0625	. 0600	. 0588	. 0700	. 0875	. 1713
April.....	. 0625	. 0600	. 0588	. 0750	. 0925	. 1713
May.....	. 0625	. 0600	. 0588	. 0750	. 0975	. 1713
June.....	. 0625	. 0600	. 0588	. 0750	. 1025	. 1713
July.....	. 0625	. 0600	. 0588	. 0750	. 1250	. 1713
August.....	. 0625	. 0588	. 0588	. 0750	. 1250	. 1815
September.....	. 0588	. 0588	. 0588	. 0750	. 1388	. 1900
October.....	. 0613	. 0588	. 0588	. 0750	. 1388	. 1900
November.....	. 0613	. 0588	. 0625	. 0788	. 1438	. 1900
December.....	. 0613	. 0588	. 0625	. 0838	. 1525	. 1900
Quarters:						
First.....	. 0621	. 0609	. 0588	. 0683	. 0850	. 1662
Second.....	. 0625	. 0600	. 0588	. 0750	. 0975	. 1713
Third.....	. 0613	. 0592	. 0588	. 0750	. 1296	. 1809
Fourth.....	. 0613	. 0588	. 0613	. 0792	. 1450	. 1900
Year.....	. 0618	. 0597	. 0594	. 0744	. 1143	. 1771

The “ fair price ” decision of the cotton goods committee, however, did not entirely solve even the price problems of the United States Government. Difficulty was being experienced, especially by the Navy, in securing sufficient supplies at reasonable prices. This was especially true in the case of cotton canvas, where it was becoming impossible to secure favorable bids.¹

Footnote continued from p. 203.

. PRINT CLOTHS, 39-INCH, 72 BY 76, 4.25 YARD.

[Base price, \$0.0648 per yard.]

	1913	1914	1915	1916	1917	1918
January.....	\$0.0650	\$0.0675	\$0.0500	\$0.0600	\$0.0925	\$0.1487
February.....	.0637	.0669	.0512	.0612	.0937	.1550
March.....	.0625	.0662	.0500	.0612	.0937	.1837
April.....	.0600	.0662	.0531	.0662	.1000	.2150
May.....	.0575	.0625	.0562	.0700	.1050	.2100
June.....	.0594	.0650	.0525	.0687	.1225	.2250
July.....	.0587	.0625	.0500	.0687	.1325	.2250
August.....	.0587	.0625	.0506	.0712	.1275	.2100
September.....	.0625	.0550	.0512	.0800	.1250	.1987
October.....	.0662	.0512	.0587	.0875	.1325	.1987
November.....	.0700	.0500	.0575	.0962	.1400	.1987
December.....	.0675	.0500	.0575	.0975	.1500	.1800
Quarters:						
First.....	.0637	.0669	.0504	.0608	.0933	.1625
Second.....	.0590	.0646	.0539	.0683	.1092	.2167
Third.....	.0600	.0600	.0506	.0733	.1283	.2112
Fourth.....	.0679	.0504	.0579	.0937	.1408	.1925
Year.....	.0626	.0605	.0532	.0740	.1179	.1957

DENIM USED BY ARMY, BLUE, 28-INCH, 8-OUNCE TWILL (3/1).

[Base price, \$0.1413 per yard.]

	1917	1918		1917	1918
January.....		\$0.2954	October.....	\$0.2858	\$0.3292
February.....			November.....	.2875	.3327
March.....		.3500	December.....	.2864	.3318
April.....		.3460	Quarters:		
May.....		.3460	First.....		.3231
June.....		.3389	Second.....		.3423
July.....		.3351	Third.....	.2568	.3363
August.....	\$0.2363	.3316	Fourth.....	.2866	.3323
September.....	.2772	.3327	Year.....	.2746	.3339

DUCK, STANDARD UNITED STATES ARMY, FIRSTS, 28½-INCH, 8-OUNCE.

[Base price, \$0.1550 per yard.]

	1917	1918		1917	1918
January.....	\$0.2000	\$0.3425	October.....	\$0.3000	\$0.3350
February.....	.2000	.3425	November.....	.3425	.3425
March.....	.2125	.3425	December.....	.3425	.3425
April.....	.2500	.3425	Quarters:		
May.....	.2500	.3425	First.....	.2042	.3425
June.....	.2750	.3425	Second.....	.2583	.3425
July.....	.3000	.3350	Third.....	.3000	.3350
August.....	.3000	.3350	Fourth.....	.3283	.3400
September.....	.3000	.3350	Year.....	.2727	.3400

¹ In some cases it was impossible to get any bids at all. See minutes of War Industries Board, Nov. 17, 1917.

Conditions became such, in fact, that the Navy was compelled to call upon the War Industries Board for aid, and suggested that the matter of fixing a price for canvas be given consideration.¹

Accordingly, the canvas situation was taken in hand and sales of certain constructions were restricted to the Government. In taking over the output of these cloths the price of one grade was reduced from 60½ cents to 46½ cents per yard, while the price of another which had remained unchanged during the summer and early autumn was increased from 30 cents to 34.25 cents per yard. But the Government consumption of cottons kept growing by leaps and bounds and the tremendous demand was reflected in an inflated runaway market. By March, 1918, fabric values reached a point 146 per cent above the prewar level and 52 per cent above the current level of commodities in general. It was soon realized by Government officials and the trade that the situation would have to be remedied.

The price-fixing committee and the cotton industry.—On May 26, 1918, seven days after the creation of the price-fixing committee, the cotton industry met, at their own request, with the price-fixing committee "for the purpose of discussing the unsatisfactory condition of the cotton textile market." The problem from the first was exceedingly complex. Unlike the situation in the iron and steel industry, the price of the basic raw material had not been fixed. It was the contention of the textile industry that the price of raw cotton would have to be fixed, before an equitable basis for regulating cotton-product prices could be inaugurated. They claimed that the market price of raw cotton was the most important of all the factors which determined the price of their product, and that with an uncontrolled market for that commodity no equitable price for cotton textiles could be established for any extended period of time. All that was needed, in their opinion, was the fixing of raw-cotton prices and the fixing of a differential above such prices for the various types of products, as in the case of iron and steel.²

The price-fixing committee, however, felt that raw-cotton prices could not be fixed. They believed, on the contrary, that the control of finished cloth would automatically be reflected in the price of raw cotton. This question of raw cotton was ever present throughout the meetings of the cotton industry with the price-fixing committee, even to the very last. In fact, it was largely because of this very difficulty that the fixing of cotton-fabric prices was delayed until more than three months after the first meeting in March. It should be added parenthetically that the problem of securing proper cost

¹ Paymaster McGowan, in a letter to the War Industries Board in November, 1917, stated: "It will be possible to control the industry and make the best distribution of Government orders if the prices are authoritatively fixed."

² Minutes of price fixing committee, May 26, 1918.

data which could be used in determining a price also caused some difficulty, since neither the price-fixing committee nor the industry had information sufficient for reaching reliable conclusions. During meetings held in April and May the same difficulties were discussed¹ with no apparent result, while conditions grew rapidly more acute.²

The fixing of cotton textile prices.—Finally, on June 21, 1918, an agreement, based on the joint findings, was made between the committees representing the War Industries Board and the trade, whereby base prices were fixed on four different classes of cotton goods, effective for deliveries after July 1. These prices were to serve as a general basis for the fixing of all staple-cloth prices, and a complete schedule for all fabrics, based on a margin of profits similar to that allowed on the four fabrics used as samples, was to follow. A 30-cent price basis for raw cotton was used in determining these prices, and Army duck, sheeting, drills, and print cloths were used as standards. Prices agreed upon were to be net to all customers, both civilian and Government.

It was realized that the prices fixed would yield a liberal profit for the better equipped and organized mills, but, after all, the purposes of the price fixing committee were attained. The cost of cotton

¹ The basis to be used in the determination of return upon investment was a factor which made the settlement of cotton-goods prices no simple task. The attitude of the cotton industry in this connection is well presented in the appended resolution passed by two of the leading cotton manufacturers' associations at a convention held May 3, 1918: "*Resolved further*, That the prosperity of industrial America is essential to the financing of the war, and that any plan for price fixing or other control should rest upon the basis of such a return on capital invested as will continue to yield the necessary taxes and to provide funds for the purchase of the bonds required."

² It appears that the question of price fixing having been raised, business in the various lines of textiles to a large extent halted, and inquiries of all sorts were made as to how both old and new contracts were to be executed. It finally became necessary, in fact, pending the actual fixing of prices, to make assurances to the trade as to the policies to be followed by the price fixing committee, and on June 9 the following was announced:

"In order to establish a basis for a prospective price agreement * * * the following tentative plan was outlined to be operative if the pending negotiations for a price agreement are concluded:

"On all bona fide sales made on or before June 8, 1918, for delivery previous to Jan. 1, 1919, prices to remain as shown in sales.

"On all sales made after June 8, 1918, for delivery subsequent to Sept. 30, 1918, the prices are to be subject to revision to accord with the prices agreed upon by the price fixing committee of the War Industries Board in conference with the war service committee, etc.

"On all sales made for delivery after Jan. 1, 1919, the prices agreed upon * * * are to be the prices regardless of the fact that the sales may have been made previous to June 8, 1918.

"It is understood that all prices for so-called spring (1919) business will be subject to such revision.

"The plan contemplates that manufacturers' prices on staples shall be on the same basis of cost and profit to the Government and to their usual civilian outlets. It is further expected that manufacturers will agree to devote a uniformly large proportion of their productive capacity to making staples."

The last statement proved of considerable concern to many producers in later months, and many manufacturers refused at times new civilian orders, fearing a sudden governmental demand. (See *Textile World Journal*, Sept. 2, 1918, p. 105.)

textiles to the Government, to be sure, was increased by a small percentage, but, on the other hand, the cost to the civilian population was considerably lowered.¹

The question was raised, to be sure, as to the practicability of a price even lower than that fixed. Indications are, however, that the cotton trade objected to too drastic a cut in the price of their goods, not only because of their own interests but also because of the effect upon the distributors of their products. They felt that since cotton fabrics go through several hands before reaching the consumer, a severe cut in price would affect the inventory of the holders of such stocks. Moreover, they felt that a price which was set too low would cut the production of many of the fabrics which the Government needed.

It should be borne in mind that the prices fixed on certain cloths were arrived at in a manner different from that which characterized the fixing of prices for other commodities up to that time. There was a decided absence of cost data. Several requests had been made for such data, but the representatives of the industry claimed that the time required for their collection and compilation would be too long to make them available for immediate use. Moreover, they believed it would delay the starting up of the industry which had already lagged because of the uncertainty over the prices to be fixed. There was wanted, in reality, an emergency price to be changed at a later date, and this the agreed price was. Indeed, the price-fixing committee felt it necessary publicly to state that its action in the instance of cotton products was "not in accordance with the usual procedure" and that it was not to be expected that its negotiations with the industry would be continued without change. The prices fixed were later to be revised for sales made during the period October 1 to December 31, or for such other period as might appear desirable at the time.²

The working out of the differentials for the various kinds of fabrics was left in the hands of a committee made up of representa-

¹An idea of the effect of the Government fixed price is gained from a comparison of the old and new prices of the cloths upon which prices were fixed. The market price of print cloth was lowered from \$1.03 to \$1.05 per pound to \$0.78 to \$0.85 per pound. A statement in the *Textile World* on June 29, 1918, is to the effect that the price of "Fruit of the Loom," a popular construction of print cloths, was fixed at 18½ cents per yard, while the lowest price quoted prior to price fixing had been 30 cents. Duck prices—although placed a little above the level at which the Government formerly made its purchases—were made 15 to 25 cents lower per pound than the prevailing civilian prices, while sheeting and drills also showed marked reductions.

²The price-fixing committee had a small amount of cost data which it had secured independently. Their validity at many points was denied by the trade, however. These figures showed a prewar profit for the cotton industry of about 15 per cent as against a war profit of 25 to 30 per cent. Several representatives of the cotton industry justified such profits on the basis of the tax situation. (See minutes of price-fixing committee, June 21, 1918.)

tives of the trade, the Army and Navy, and the War Industries Board. It was the function of this committee to submit prices for a large number of representative fabrics based upon a return on the capital investment of the average cotton manufacturing plant equal to that allowed for the four types of cloth which had been selected as the basic staples.¹ The idea was to compile a list of fabric prices so thoroughly representative that it would be comparatively simple for the industry itself to fix prices of cloths varying slightly in construction in harmony with the published prices.

Criticism of prices to be fixed in this way was, of course, bound to occur in many instances. A committee of textile experts was therefore appointed to act as arbiters in those cases where objection was raised against the prices at which the variants from standards were being sold, and the price agreed upon between this committee and the trade was to be made officially one of the fixed prices. The price-fixing committee, however, remained the court of last resort, and in this body lay the right to make a final decision whenever the trade and the committee of experts failed in reaching an agreement.

The prices agreed upon affected only the sales by the various mills manufacturing cotton products. No attempt was made to fix the price of the middleman or retailer, since the price-fixing committee trusted that those members of the trade would see to it that their prices were regulated in accordance with the prices of the producers.²

At later meetings with the price-fixing committee, the cotton manufacturers protested as unfair the lax manner by which price fixing was extended over the various middlemen and distributors. They suggested the licensing of brokers and middlemen, but were told that the price-fixing committee had no authority for such action.

The policy of the price-fixing committee appears to have been consistently to deal only with the manufacturers themselves. Even early in September, when the wholesale dry goods trade wanted to fix a maximum price for the distribution of cotton fabrics, they were told that the matter would be left to their own care. The Cotton Con-

¹ The price-fixing committee from time to time approved prices on cotton products as determined by a committee of the trade and the textile experts. Announcements of agreed prices were made July 1, 25; Aug. 7, 9, 14, 16, 22, 30; Sept. 3, 5, 25; Oct. 17, 28; Nov. 4, 8, and 9, respectively.

² It was felt that the request of the President that the distributors of cotton goods, namely, manufacturers of ready-to-wear clothes, as well as all dealers in cotton fabrics, regulate their profits so as to give the consumer the full benefit of the reduction in price (see price-fixing committee's announcement to the press, July 8) would result in a lowered price all along the line to the ultimate consumer. Whether such was really the case appears doubtful. To wit, the following extract from an editorial in the *Textile World Journal* of June 29, 1918: "Price fixing on cotton goods for the benefit of the trade and the protection of the ultimate consumer goes a long way, but unless the retailer, too, is curbed, it will still fall short. In a Fifth Avenue store \$1.15 was charged for a gingham that was sold elsewhere on the avenue for \$0.50. Shortly after this comparison was made the first store marked its goods as a bargain at \$0.75, reduced from \$1.15."

verters' Association, indeed, limited the profit to be realized from converting those fabrics on which prices had been fixed by the Government, but this action was quite of their own volition and without reference to any activities of the price-fixing committee.

Cotton yarn prices.—Among the many cotton products, the price of which was to be fixed by the above-mentioned committee of the trade and the War Industries Board, appointed for the determining of equitable prices, was cotton yarn. On August 14, a set of differentials based on the prices fixed on June 21 was announced to the trade. The prices determined were based upon the length of the cotton staple used in specific yarns, thereby making the price depend entirely on the character of the cotton employed. Such a policy appears to have been contrary to the general practices of the trade, since cotton yarns are usually sold indirectly through commission houses. Sellers usually have little intimate knowledge either of the grade or the length of the cotton employed in spinning. It is with the spinners that this information generally lies. Moreover, the cotton spinners, whose profits are the first to be affected by a change in raw cotton prices, were experiencing the results of a rising raw-cotton price. The situation appears to have caused considerable consternation in the spinning branch of the cotton industry, and for many weeks the business is said to have been completely halted.¹

The proposed price revision.—As October 1 approached, the question of revising cotton-goods prices arose, and the cotton trade began meeting once more with the price-fixing committee. But again the identical problems of the preceding June presented themselves. Thus, in early September little was accomplished toward price revision, because the same lack of cost information held up negotiations. Indeed, "the failure of a large number of cotton mills to submit their cost sheets" resulted in the postponing of any revision until November 16.² The question of fixing raw-cotton prices arose, as in former days, of course, and played its part in occasioning the delay of a revision. Talk of governmental price fixing was rife at the time, and a committee had already been appointed to look into

¹The Textile World, in an editorial, of Aug. 17, 1918, summed up the situation as follows:

"The more the program of price fixing is developed in the textile trade the greater seem to be the confusion and uncertainty that arise. The latest instance of this character is the announcement from Washington concerning regulated prices on cotton yarns * * *. The yarn-selling market is in a state of chaos and unable to determine how to proceed."

Later, on Sept. 7, this same paper stated that—

"The cotton-yarn trade is still worrying along in a period of adjustment to the new conditions laid down by the price regulations. * * *"

Relative to the price of raw cotton, it said:

"The recent sharp advances in cotton prices have again emphasized the fallacy of the effort to fix yarn prices as long as the raw material remains unchecked."

²See public announcement of price-fixing committee, Sept. 26, 1918.

the matter; and it was thought advisable to await the results of their investigation before making a final decision regarding cotton-goods prices.

The Federal Trade Commission at last succeeded in getting a sufficient number of firms to submit data on production costs to warrant further action by the price-fixing committee, and on November 8, accordingly, the representatives of the trade were called in for further consultation. The cost records evidently convinced the price-fixing committee that the prices of cotton goods, even as fixed under the July arrangement, were too high,¹ and it was their opinion that a lower price, especially on denims and several other types of cloth, should be inaugurated for the period to follow November 16.

¹ The price-fixing committee contended that in order to place other fabrics on a parity with cotton sheeting, which was used as the basis for price determination, prices should be fixed so as to allow a 25 per cent return on plant investment. This profit was being exceeded in their opinion, and as proof of this fact they submitted the following figures (minutes of price-fixing committee, Nov. 8, 1918):

THREE-YARD SHEETING COSTS.

Investment cost:

Fixed cost per spindle.....	\$37
Working capital required.....	13
Total investment.....	50

Conversion cost:

	Per pound of sheeting.
Raw cotton used in sheeting.....	\$0. 38
Cost of spinning and weaving.....	. 095
Twenty per cent additional labor cost allowed.....	. 020
Selling cost.....	. 025
Total conversion cost.....	. 52

Price fixed f. o. b. mill, \$0.60 per pound, leaving a profit of \$0.08 per pound. The average spindle consumes 150 pounds of cotton per year, and, on a basis of \$0.08 profit per pound, there results a yearly profit of \$12 or 25 per cent on the capital investment per spindle.

DENIM COSTS.

Investment cost:

Fixed cost per spindle.....	\$55
Working capital required.....	20
Total investment.....	75

Conversion cost:

	Per pound of denim.
Raw cotton (allowing for 10 per cent shrinkage) at \$0.32 per pound.....	\$0. 36
Cost of spinning and weaving.....	. 17
Twenty per cent additional labor cost allowed.....	. 035
Selling cost.....	. 025
Total conversion cost.....	. 59

To place denim on a parity with 3-yard sheeting, i. e., the realization of a 25 per cent return on investment, with an estimated consumption of 250 pounds of cotton per spindle per year, \$0.08 per pound should be added to the ascertained cost of production. This would net a return of \$20 per spindle per year, or a return of approximately 26 per cent on a spindle investment of \$75, and would make the selling price of denim \$0.67 per pound. The then existing price, however, was \$0.80.

The validity of these data was denied by several members of the trade, principally because of the omission of any allowance for investment in buildings, and the divergency in costs in southern mills as compared with northern mills.

The price of raw cotton, incidentally, had not yet been fixed, and ostensibly fearing a rise in price, the cotton trade objected to any decrease in the prevailing schedule of prices. In fact, they went to the extent of suggesting that the prices then in force be continued until January 1. And, in spite of opinion to the contrary, especially on the part of several members, this suggestion of the cotton trade was put into practical operation. The prices in force on November 8 were continued until January 1, 1919, but not without considerable reservation. Indeed, for the first time the price-fixing committee emphasized in a public statement that the prices in force were maxima and that both the Government and the public were allowed to purchase as much below these prices as possible. Further, the price-fixing committee went so far as to disclaim responsibility for their fairness.

Then came the armistice with its wake of cancellations and the general disorganization of the cotton industry and the question as to the advisability of discontinuing price control. The cessation of control appears to have been advocated by many, both within and without governmental circles, but the preponderance of opinion lay in the direction of its continuance. There was, for example, the question of the behavior of the market with the opening of the international trade routes, especially in view of the foreign demand for raw cotton, the export of which had been held in check for almost a year. Moreover, the possibility of complications over contracts made under the maximum price agreement was another deterrent, and the fixed price agreement continued until January 1, when it automatically ceased by limitation.

Summary.—The extraordinary inflation resulting because of the taking from the market by the War Department, and the Navy, of the major portion of available cotton textiles, threw the cotton industry virtually into disorganization by the spring and early summer of 1918. The market had become dangerously inflated, to the extent, indeed that the Government was compelled to commandeer practically all its textile supplies in order that it might secure them at fair prices. The consequent result, of course, was the unwillingness of the industry to sell to the Government, and in early summer price fixing was inaugurated.

The absence of cost data, and the question of raw-cotton prices, were considerable factors which made difficult an equitable method of price fixing, and even at the very end of the period of price agreements, there remained obstacles of considerable moment.

Whether the results attained were as beneficial as they might have been under a system of strict limitation of profits to the prewar level, it is not within the scope of this study to determine. The

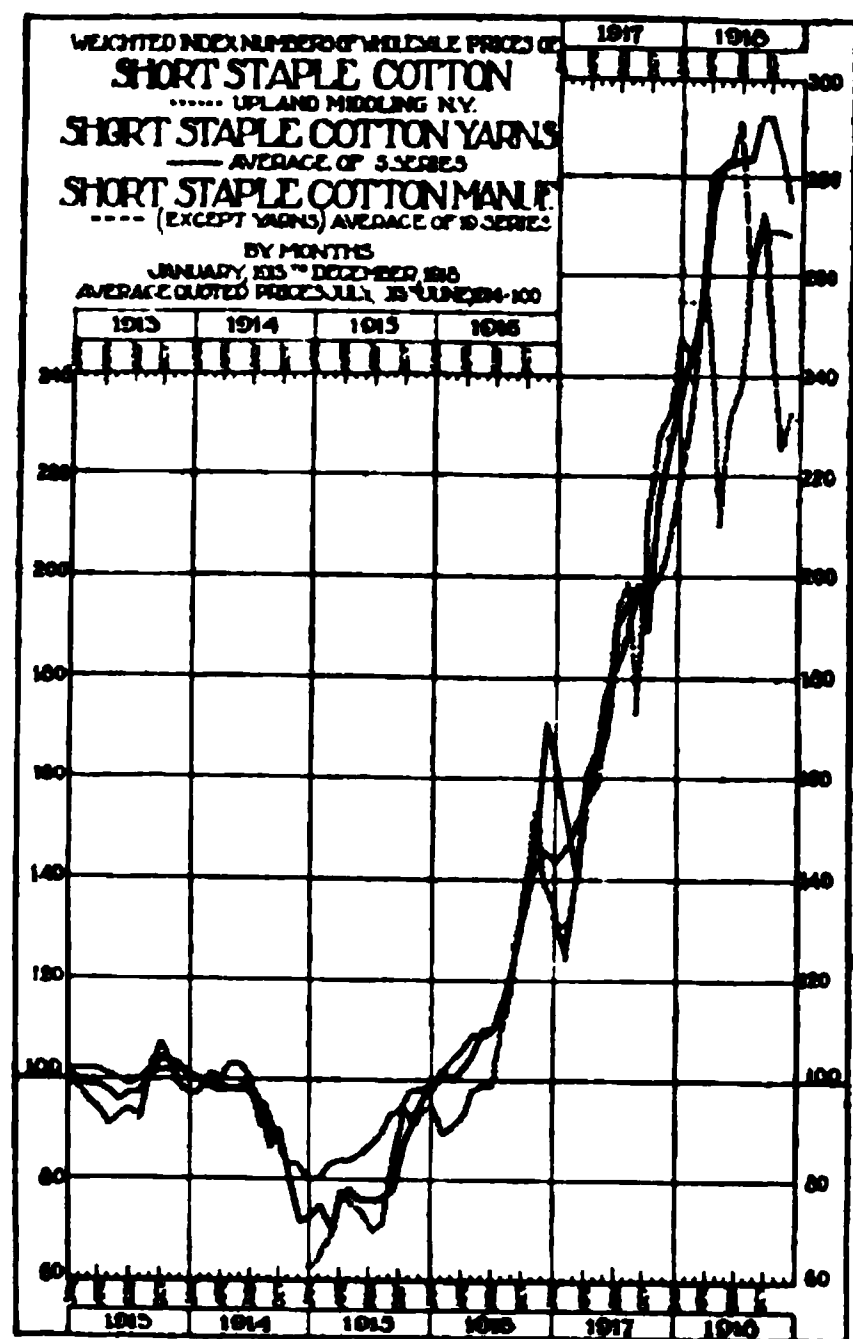
prices of cotton manufactures, in spite of price fixing, remained at points varying from 64 to 87 per cent above the level of commodities in general during the latter half of 1918, while raw cotton, which was uncontrolled, advanced at no time during this period more than 61 per cent above the general price level. That the price situation was considerably alleviated by the fixing of cotton prod-

ucts prices, however, can not be denied, and not only did the price of several individual types of fabrics decrease, but, as evidenced by the accompanying chart, the price level for the entire group of cotton manufactures fell appreciably.

COTTON LINTERS.

Even in November, 1916, five months before the United States declared war, the price of cotton linters had reached insecure heights. The allied demands for explosives were fast taking the available supply and the year 1916 closed with the price of munition linters at 7.75 cents per pound, or 278 per cent above its prewar level of 2.5 cents.¹ With the American entrance into the war, the acuteness of the situation was considerably emphasized.

The requirements for munitions purposes increased the demand for linters to a very con-



Weighted index number of wholesale prices.—Short staple cotton, upland middling, New York; Short staple cotton yarns, average of five series; Short staple cotton manufactures (except yarns), average of 19 series.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

siderable degree, and ways were sought for increasing production to an extent commensurate with this demand. One means of enlarging the output was the closer cutting at the oil mills, thereby taking a larger proportion of the linters from the seed. This, of course, lessened the quality of the linters, but the low grades were found just as satisfactory for munition making as the higher.

The oil mills then, in 1915, began to cut the cotton seed much closer than had been customary, and increased the output of linters

¹ See "Prices of Cotton and Cotton Products," by James H. Rogers (War Industries Board Price Bulletin No. 23), for a complete series of cotton linter prices from January, 1913, to December, 1918.

per ton of cotton for the year 1915-16 approximately 50 per cent above that of the preceding year.¹ The increased output per ton of cotton was reflected in the available supply of cotton linters and the crop year 1916-17 witnessed a production of 1,331,000 bales, which meant a 100 per cent growth in output when compared with the year immediately preceding the outbreak of the World War.²

Even this extraordinary increase in the available supply, however, neither stabilized the price level of cotton linters nor met the ever-growing needs for munitions purposes. Thus, in the crop year 1915-16, despite the fact that the quality of our linter output had been reduced by increasing the quantity cut from the seed to 106 pounds per ton of cotton, as contrasted with 71 pounds in the preceding year, the average price rose to 5.9 cents per pound as against 1.9 cents per pounds for the crop year 1914-15. In 1916-17, with a linter cut increased to 149 pounds, the average price increased to 6.8 cents.³

¹The effect of close cutting upon the output of linters per ton of cotton is made more evident from the following table taken from bulletin on "Cotton and Cotton Products."

Year.	Average pounds of linters cut per ton.
1912-13.....	64
1913-14.....	68
1914-15.....	71
1915-16.....	106
1916-17.....	149
1917-18.....	133

²In the appended table are given the figures for the production of cotton linters from 1912 to 1918 as compiled by the United States Bureau of Census. The effect of close cutting, especially upon the supply of cotton linters available for munitions, is most significant.

Production of cotton linters in the United States.

Crop years.	Bales of 500 pounds.
1912-13.....	610,000
1913-14.....	639,000
1914-15.....	857,000
1915-16.....	931,000
1916-17.....	1,331,000
1917-18.....	1,126,000

³The price of linters from 1912 to 1917 as presented in Bulletin 30, follows:

Crop years.	Weighted average price per pound.
	<i>Cents.</i>
1912-13.....	2.6
1913-14.....	2.3
1914-15.....	1.5
1915-16.....	5.9
1916-17.....	6.8

The entrance of the United States into the war witnessed a shortage of cotton linters, in spite of the doubling of our production in five years. Indeed, the first duty which faced the cotton and cotton linters section of the War Industries Board which was organized on April 4, 1918, was the investigation of the cotton-linter situation and the determination of the seriousness of the cotton-linter shortage.

Accordingly, the entire field of cotton linter production was surveyed, and the prospects of an acute shortage of supplies made clear. The investigation indicated that the average annual production of linters in the five years preceding 1918 was less than one-half of the prospective requirements for 1919.¹ While there was no shortage of linters at the moment, the approach of a shortage seemed inevitable since the Government was at the point of completing a number of new powder plants which would soon double the linter requirements. Moreover, it was found that there were being produced some 10 to 12 grades of linters, and that a large part of our output was going into the manufacture of mattresses, felts, etc.

Government control of the linter crop.—The immediate need, then, was the stimulation of linter output, and with this in view, cotton-seed crushers were required to increase the cut of linters. After May 2, 1918, at the order of the War Industries Board the oil mills were required to "cut clean mill run linters known as munition type" exclusively. Moreover, crushers were compelled to cut a minimum of 145 pounds of linters per ton of seed crushed. And for the period May 2, 1918, to July 31, 1919, these linters were to be sold to no one other than the United States Government, which agreed to take over the supply produced from the 1918-19 crop at a price of \$4.67 per hundredweight f. o. b. points of production.²

This, of course, meant that the many industries which normally used cotton linters would be deprived of their supply. But it appears that they underwent no hardship, for the War Industries Board had thoroughly surveyed the situation and had found that there was available a sufficiently large supply of cotton mill waste, hull fiber, and wood pulp which could well be used as a substitute for cotton linters in the normal linter-consuming plant.

The cotton linter pool.—When the supply of cotton linters had been brought under control and the price stabilized, there still re-

¹ Final report of cotton and cotton linters section, War Industries Board, 1918.

² This price, 0.058 cents lower than the price of August, 1917, the last month for which authoritative price quotations can be secured, was ratified by the price fixing committee and made effective May 2, 1918.

Several months later, on July 8, 1918, the price fixing committee set a maximum price of \$6.83 per hundredweight for the bleaching of linters. This price, however, in view of the large bleaching capacity of the country and the ever-present competition, appears never to have been effective. Indeed, it is believed that contract prices were appreciably lower than the maximum allowed. The fixed price expired by limitation on Oct. 31, 1918.

mained the problem of its distribution. There was not only the need of linters for our own consumption, but also the constant demands of the allied governments which were largely dependent upon us. An organization made up of representatives of the Allied Governments to supervise distribution was therefore created, and "The Cotton Linter Pool" came into being.¹

This body, the guiding spirit of which was the Ordnance Department of the United States Army, provided for the securing of linters at uniform prices for the various members and had as its purchasing agent the Du Pont American Industries (Inc.), to whom was allowed 26 cents for each bale of linters purchased for the "Pool."² It appears that ample supplies of linters were obtained during the summer and autumn of 1918. With the signing of the armistice, however, the Government needs automatically ceased. But there still remained the obligation of continuing the purchase of linters. The fulfillment of this responsibility was placed in the hands of the Ordnance Department.

Restrictions as to the cutting of linters were no longer necessary, and crushers were not required to cut the minimum of 145 pounds of linters per ton of seed as had been decreed on May 2. Crushers immediately began, therefore, to resume cutting the longer linters which could be used in the manufacture of mattresses and like commodities, and for which they could secure a higher return.

Among the tasks facing the Ordnance Department was the disposition of linters on hand which had cost approximately \$20,000,000, and attempts to dispose of this surplus resulted in the War Department receiving bids for small quantities for which a price averaging less than 2 cents per pound was offered. Finally, on May 24, 1919, the War Department announced the sale of 700,000 bales of cotton linters for approximately \$15,000,000, one of the largest single transactions in cotton fiber ever consummated in the history of the cotton industry.

¹Among the participants in this pool were the United States Government, represented by the Ordnance Department of the Army, the Canadian, French, British, Italian, and Belgian Governments, manufacturers of explosives having United States or Allied Government contracts for powder or guncotton, and "manufacturers of absorbent cotton or other supplies, using cotton linters, having United States or Allied Government or Red Cross contracts."

²The final report of the cotton and cotton linters section of the War Industries Board enumerates in part the functions of the linter pool and the system of division of powers, as follows:

The United States Ordnance Department had jurisdiction over (1) the production and stimulation of linter production; (2) requisitioning or commandeering stocks; (3) all financing, either as to production or purchases; and (4) disputes arising between purchasing agency and producers.

The cotton and cotton linters section of the War Industries Board had jurisdiction over (1) allocations of supply; (2) storing and warehousing; (3) rules pertaining to linter manufacture; and (4) reports and records of stocks, production, requirements, etc.

The expenses of the pool were prorated among the members.

The mattress linter pool.—Although virtually the entire supply of linters went into the manufacture of explosives, there apparently remained an appreciable governmental and Red Cross demand for linters for mattresses for hospital uses. The production of linters for such purposes had been prohibited on May 2, 1918, but there still remained a supply of mattress linters which had been produced prior to that date. In order to meet the war demands for these linters, therefore, the "Mattress Linter Pool" was formed and as in the case of munition linters, the Du Pont American Industries (Inc.), was appointed purchasing agent "with instructions to buy all mattress linters available from production prior to May 2, 1918."¹ Pains were taken to insure the obtaining of the greatest supply possible, and regulations were drawn up which prohibited "the use or sale of mattress linters by or to any individual, firm, or organization, other than the Mattress Linter Pool." This, of course, made such supplies as were existent of little or no immediate value to the holders thereof and naturally the result was a desire to sell to the only permissible customer. Provisions, however, were necessary as to the price of linters under this arrangement. Accordingly, a basic price on three sample types of linters was determined by agreement and the Du Pont Co. was instructed to buy at the figure fixed for all supplies voluntarily offered.²

It is estimated that about 75 per cent of the mattress linters in existence were purchased by the Mattress Pool.³

On the day following the signing of the armistice all restrictions relative to the use of mattress linters were removed. It was necessary, however, to give the industry an opportunity to get its breath after so sudden a change, and provision was made to continue the buying of mattress linters until November 23, from anybody who wished to sell.⁴ An arrangement was also made whereby those mattress manufacturers who had voluntarily sold their linters at the agreed prices might buy back at the same figure the supplies turned over to the Government.

¹ Report of cotton and cotton linters section, *ibid.*

² Three grades of linters, designated as "A," "B," and "C," were used as samples and a figure of 10 cents, 7 cents, and 5.5 cents f. o. b. points of location, respectively, was agreed upon as the price to be paid. All linters below grade "C" were to be considered munition linters and were to sell at \$4.67 per hundredweight (see p. 703).

³ Report of cotton and cotton linters section, *ibid.*

There were many holders of mattress linters who were unwilling to sell their supplies at the agreed prices, and in such cases the Ordnance Department was to exercise its commandeering powers. This method of securing supplies gave the owner opportunity to establish the actual value of the commodity.

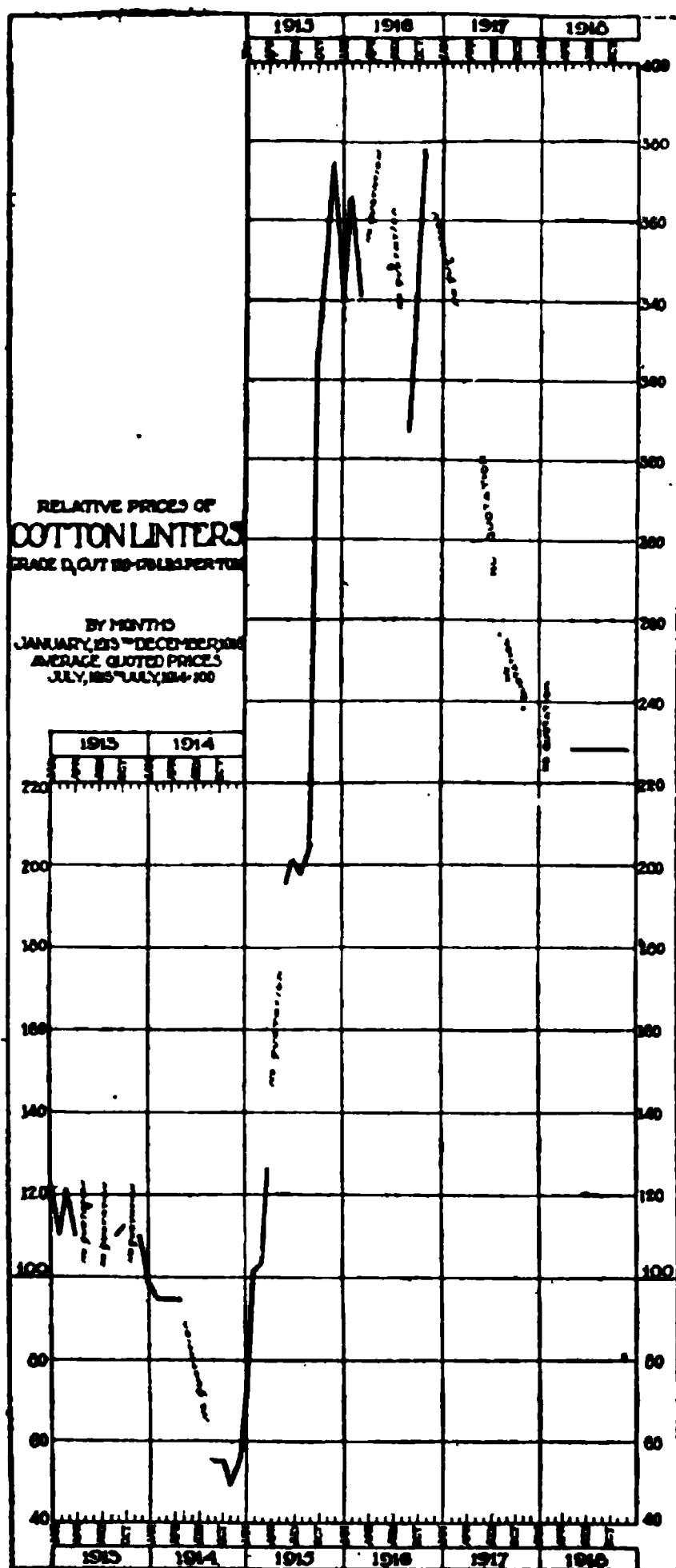
⁴ Later the Ordnance Department, in order to protect the producers of mattress linters, agreed to take over any surplus of mattress linters up to 150,000 bales which might be on hand on July 1, 1919, at a price of 8 cents, 7.5 cents, and 5 cents for the three grades "A," "B," and "C," respectively.

A glance at the accompanying chart will give an idea of the stabilizing effects of governmental action upon the price of cotton linters. Its price level appears to be subject to violent fluctuations even in peace times and at no time during the entire six-year period, 1913 to 1918, did munition linter prices remain unchanged for more than a few months at a time. Moreover, so far as available statistics show, during no month from September, 1915, to May, 1918—the month of governmental price fixing—was the price of linters as low as that fixed by the War Industries Board.

WOOL.

The large consumption of wool in the United States has made it necessary for the American woolen industry to be at all times dependent in large part upon foreign imports. Indeed, the proportion of domestic wool which in the prewar years went into the manufacture of woolens and worsteds never amounted to more than two-thirds of our total consumption, while in many instances it comprised slightly more than one-half. With the stimulation of the industry in 1915, brought about by the allied demand for woolen products, the proportion of our total consumption supplied by domestic raw wools fell off until, before the year

ended, our imports played a more important part in our woolen industry than did the home clip. The foreign wools used in the United States in 1916 amounted to 534,828,022 pounds as against 288,490,000 pounds of domestic wools—a ratio of 2 to 1.



Relative prices.—Cotton linters, grade D, cut 180—175 pounds per ton.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

The acute shipping situation of 1917 and the shutting off of supplies from Australia,¹ which had been our most important source of raw wool in the two preceding years, cut the imports for 1917 down to a little more than 372,000,000 pounds. The consumption for the year likewise fell, and the industry in 1917 used 164,000,000 pounds less wool than in 1916. But the large requirements of the Army soon increased the demand again, and the first half of 1918 witnessed a consumption equal to two-thirds of that of the previous year, and almost as large as the total for the year preceding the outbreak of the European War. Although the imports were fairly large during the first six months of 1918, they were not commensurate with the demands. The result, then, was a decrease in stocks which on June 30, 1918, amounted to 494,000,000 pounds of wool, or 91,000,000 pounds less than at the same date in 1917.

It is apparent that under such conditions the prices of wool could not remain immune from manipulation. Indeed, shortly after the declaration of war they began to rise so that by the end of 1914 they were 20 per cent above their prewar level. Then came the demands of the various allied powers for woollen goods, especially for military purposes, and 1915 and 1916 witnessed an extraordinary rise. At the end of the latter year raw wool sold for just twice its 1913-14 price.² Then came the cutting off of the Australian supply,³ and the American entrance into the war.

The American declaration of war had a stimulating effect upon the woollen trade. Before the year 1917 was half over prices rose to a point 225 per cent above the peace-time average. Dealers bought far into the future and speculation was rampant.

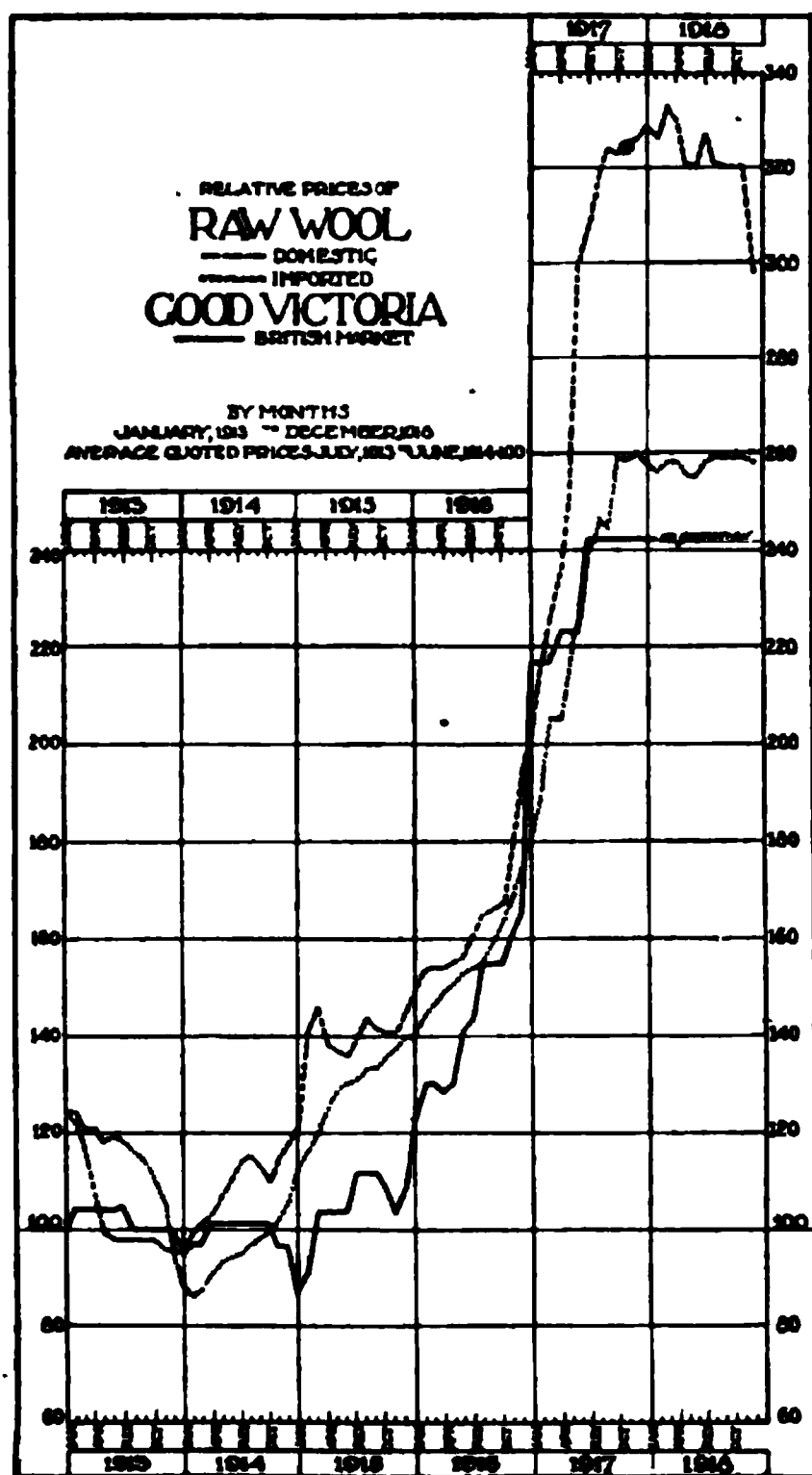
The approach to regulation.—Many members of the woollen industry, however, foresaw the disorganization which followed the

¹ During 1915 and 1916 Australia furnished approximately 25 per cent of the wool imported into the United States. In November, 1916, the British Government purchased the Australian production of wool for the period of the war and one year thereafter. This, of course, had an important effect upon the receipts during 1917 and imports from Australia for that year fell to 7,000,000 pounds, as against 115,000,000 pounds in the preceding year. Arrangements which were later made with the British Government increased the 1918 receipts from Australia a considerable degree.

² Ohio three-eighths blood, unwashed wool, sold in December, 1916, for 49 cents a pound, as compared with 38½ cents at the beginning of the year. The average price for the 12 months preceding the outbreak of the war had been \$0.2369. Similarly, territory combing, one-half blood, sold at the end of 1916 for \$1.003 per pound, as against 73.8 cents in January and \$0.5228 in the prewar year. Imported wools, also, felt the effects of the war needs for cloth, although the rise in their price was not quite equal to that of the domestic product.

³ The cutting off of the Australian supply, which had been mentioned above, may be said to have had a greater effect upon the price of raw wool than any other single factor other than the military needs of our Army. Not only did the British purchase of the Australian clip actually cut down our potential supply, but these wools were especially desirable for American manufacture because of their fine quality. Wools of similar quality could not be duplicated in any other foreign market, and the psychological effect of this loss upon the trade was of great consequence. During the four months following the taking over of the Australian supply by Great Britain, domestic wool prices rose 40 per cent, as compared to the prewar basis.

American entrance into the war. Indeed, on April 10, 1917, four days after the declaration of war, the textile alliance notified the general munitions board that there would not be enough cloth in the country to meet both the requirements of the Army and Navy and civilian needs.¹ It is probable, however, that the general munitions board did not realize the significance of the warning, and the matter was turned over to its committee on supplies "with the understanding that if necessary the board would suggest to the Council of National Defense that it arrange with the British Government to remove the embargo" then existing on wool. There followed an offer on the part of the various brokers in the important markets to turn over to the Government such stocks of wool as they had on hand at a price equal to that in effect on April 2.² Although several members of the board urged acceptance of the offer, ignorance of the military requirements and the fear that governmental action would further disturb an already unstable market led to its rejection.³ Moreover, it was felt that the acceptance of the offer and the resultant low price to the military authorities would result in raising the price of other wools to manufacturers. The War Department apparently was not fearful, and believed that its requirements could be met.⁴



Relative prices.—Raw wool, domestic, imported; and Good Victoria British market.—By months, January, 1913, to December, 1918. (Average quoted prices July 1913, to June, 1914=100.)

¹ Minutes of the general munitions board, Apr. 10, 1917.

² Mr. J. Rosenwald, who headed the committee in charge of wool supplies, when asked to report the result of his conference with the wool dealers, informed the general munitions board that "The brokers in Boston, Philadelphia, and Chicago had agreed to hold such wool as they (then) had on hand for the use of the Government, and that a price equal to that in effect on April 2 for raw wool had been decided upon." (Cf. Minutes of general munitions board, Apr. 11, 1917.)

³ Minutes, loc. cit.

⁴ The following extract from the minutes of the meeting of the general munitions board on April 13, 1917, sums up the point of view of the military authorities on the question of wool: "Col. Hodgson reported that * * * had advised him that orders had been placed for articles requiring wool, so that there was no necessity for holding the wool recently offered by woolen brokers. Col. Hodgson further stated that the feeling at the Quartermaster's Department seemed to be that there was no apprehension as to wool at this time."

It had apparently also been the belief of the Quartermaster Department that it could obtain a better price at a later date, but instead the wool market continued upward. Finally, in July it became evident to those in charge of supplies that it would be advisable for the Government to accumulate a stock of raw wool, and a committee was appointed under the committee on supplies of the Council of National Defense to buy wool for the Quartermaster Corps. When this committee came on the market it found conditions quite the reverse from what had been expected. Wool prices had gone up in spite of the Government's refusal to accept the offer made by the trade in the preceding April, and the prices of July 30, relative to the prewar basis, were over 100 per cent higher than those of April 2.¹

The abnormal speculation in woolens virtually came to an end in the summer of 1917, and relatively little happened to the price of raw wool during the succeeding fall and winter. By October, however, the Quartermaster General, as well as the committee on wool supply, began to doubt the sufficiency of the existing wool supply and the advisability of letting the wool market follow its own unregulated course. Indeed, in late October, the chairman of the committee on wool supply advised the War Industries Board that some sort of governmental action ought to be taken in order to control the situation.² This was followed, also, by a letter from the Quartermaster General in which the possibility of the Government's purchasing the entire wool clip of the country was suggested.³ It was the opinion of the board, however, that such action was inadvisable and so the Quartermaster General was informed.⁴

Here, once more, the fact that the authorities concerned with wool did not know the full Army needs was a controlling factor. In their judgment, supplies were adequate, and to substantiate their belief they made the statement that the bulk of the manufacturers had covered their wool requirements for all Government contracts calling for deliveries up to June, 1918. After that date, in their judgment,

¹ This situation evidently was disappointing to the purchasing authorities and they bought only a relatively small amount of wool. It was not known by the Government purchasers either what the size of our Army was to be or what its needs would amount to. Accordingly, they purchased but little in the domestic market and began negotiating with Great Britain for the purchase of Australian wools, which, if obtainable, would have been available at a price much lower than that of the American product. This was probably viewed as an initial step in breaking the domestic price, but since this wool, which was finally purchased in October, did not arrive before the spring of 1918, when the price of wool had been already fixed by the price-fixing committee, the purchase was never effective in lowering the American price level.

² Minutes of War Industries Board, Oct. 11, 1917.

³ Minutes of War Industries Board, Nov. 15, 1917.

⁴ In late November a third suggestion relative to the control of wool was made, this time by the committee on price control of the Philadelphia Wool and Textile Association. This body advocated the fixing of a maximum price for raw wool, but their proposal, like the others, did not receive any indorsement.

the new domestic clip and imports from foreign countries would provide a sufficient supply.¹

The adoption of a regulative policy.—By early 1918 the need for a more positive program became clear. The Army authorities, through the use of the War Trade Board import restrictions, had already secured an option on all foreign wools entering the United States.² A census of existing stocks, nevertheless, showed that something more than the control of the imported varieties would be necessary if the Army requirements of about 125,000,000 pounds of scoured wool were to be met.³ Evidence of shortage had already been presented in the fact that the Army was compelled to use shoddy. Accordingly, on April 5, 1918, the War Department requested the Boston Wool Trade to grant to the Government an option over the existing stocks of raw wool. The trade agreed, and promised also to buy no more new wool from the growers until otherwise notified by the authorities. The effect of this action was soon reflected in the attitude of the wool growers whose markets had been automatically cut off. It appears that they had not been informed of the instructions to the wool dealers regarding the cessation of purchases and it was their impression that the dealers had stopped buying because of the fear of governmental price fixing.⁴ They at once made inquiries of the War Industries Board as to the policy to be pursued by that body, but evidently they received no definite assurance as to just what was to be done. The growers, it seems, feared that the price of their product would be fixed at a price

¹ Just what the attitude of the War Industries Board toward the wool situation was, is well presented by the following extracts from a memorandum sent to the Quartermaster General on Nov. 15. Among other things, it said:

"We do not feel the urgency at this time of taking on these duties (taking over of the wool clip) for the following reasons: (1) The purchasing of wool in the grease requires very expert knowledge. It would be necessary to engage a staff of these buyers before we could intelligently purchase such a large and varied assortment of wool as the United States grows. (2) The bulk of the manufacturers have covered their requirements on the Government contracts they have undertaken. (3) The latest figures, dated, Sept. 30, 1917, show unsold wool in Boston equal to 130,000,000 pounds. To this we can add the 70,000,000 pounds of Australian wool and about 10,000,000 pounds of East India wool released by the British Government to us for Government requirements. * * * We can figure on at least 200,000,000 pounds from South America in the next few months. The items will bring the total to over 400,000,000 pounds available. By May and June the new wool clip of the United States will be coming on the market. This represents another 270,000,000 or 280,000,000 pounds.

"We may feel after the first of next year that it is necessary to take some action on the purchase of a part of the new clip, but for the present, owing to reasons advanced above, we feel that it is better to let the matter rest as it is."

² On Dec. 15, 1917, the War Trade Board had ruled that after that date all imported wools would be subject to Government option at a price equal to 5 per cent less than the July 30, 1917, price in Boston.

³ A census of wool stocks made in early 1918 by the War Department disclosed a supply in the hands of dealers of less than 35,000,000 pounds, scoured basis.

⁴ A statement made by the representatives of the National Wool Growers' Association at the first meeting of the price-fixing committee and the wool growers was to the effect that the dealers in the West would not buy wool because they feared that the Government would fix the price of wool at a figure lower than the current market figure.

relatively lower than that then prevailing, and thought it desirable that any such move be preceded by action on their part. They therefore asked for an opportunity to appear before the price-fixing committee, and April 19, 1918, they offered their entire clip to the Government at the current market price.¹ In the event that the price-fixing committee was unwilling to buy the clip, it was the opinion of the wool growers that the entire situation should be left free to the unregulated forces of the market. Moreover, they believed that the governmental authorities ought to make a public statement to that effect. In other words, the wool growers wanted the price fixing committee publicly to commit itself to the policy of leaving the American wool clip untouched. But this the price-fixing committee refused to do, remarking in the course of its refusal that they had no authority to bind the Government to any policy.²

Negotiations with the wool growers were about to end when the representative of the wool section of the War Industries Board made the statement that the military forces would require the whole domestic clip, and suggested that the Government buy it.³ Immediately the situation was changed, and from that moment it was quite evident that the United States Government was about to take over the 1918 clip.

With the question of the disposal of the wool clip settled, it remained to fix a price at which the Government would take wool over. The growers insisted upon the current market price, which, as has already been said, was three times higher than the 1912-1914 level. The price-fixing committee refused this request, and reference was made to the British purchase price, which was but 75 per cent above the prewar average, to substantiate their refusal.⁴ In their opinion the price of July 30, 1917, was a fair price for raw wool, especially in view of the fact that the Government had been purchasing imported wool at that figure during the preceding four months. They contended, furthermore, that the April, 1918, price was not a "fair

¹ This offer was made, however, only with the provision that the Government buy the entire clip, which was estimated to be about 300,000,000 pounds. The market price incidentally was at the time about three times the prewar average. In the course of the discussion between the growers' representatives and the members of the price-fixing committee it was brought out that the price asked for the clip varied from 45 to 80 cents a pound, depending on grades, whereas formerly similar wools sold from 5 to 20 cents.

² See Minutes of price fixing committee, Apr. 19, 1918.

³ Mr. Elliot said: "Gentlemen, the Government needs will require all of the clip, so why should we not buy it?"

⁴ It is interesting to note, in this connection, the growers' contention that the then current high prices were necessary to keep production at the high level required by war needs. And this theory of stimulating production, according to several members, also guided the price-fixing committee in determining upon what price should be fixed for a given commodity (see p. 242). In the instance of wool, however, the price-fixing committee seems to have laid aside this theory, as is shown by the following statement of the chairman: "The old theory that the high price stimulates production is an error. One side is when a man gets a certain amount, his steam power gets down a little lower. He doesn't work as many days. In other words, it isn't exact science that the higher price increases production."

market price," since it was not established under normal conditions, whereas the July, 1917, figure was one which was arrived at in a market where Government demands played little or no part.¹

The wool growers, however, claimed that the offer of the Government did not allow for the high costs of producing wool and refused to accept the suggested price. The dealers from the various large wool markets had by this time also taken up their case with the price fixing committee, and they, too, objected to the July 30, 1917, price, since it allowed for no profit. But refusal to accept the proffered price was in vain, for both the growers and dealers were told that there were but two alternatives—first, the July 30, 1917, price; or second, the commandeering of the entire wool supply and the determination of a price by Board of Appraisers of the War Department.² The former alternative was accepted and on April 23 the Government agreed to take over the raw wool then in the hands of dealers at a net price equal to that of July 30, 1917;³ while an agreement was made with the growers whereby the Government was given a prior right to acquire all of the 1918 wool clip or "any portion thereof that it might require."⁴ The remainder was to be subject to allocation for civilian purposes under the direction of the War Industries Board.

To the War Department was assigned the task of handling the wool supply, although the machinery for purchasing and evaluating was formed by the price fixing committee, acting in conjunction with the growers and dealers. All parties desired that as little change as possible be made in the organization of the woolen industry. The final plans, therefore, provided for the use of the customary channels of distribution. The growers were to consign their wool to dealers⁵

¹The legal department of the War Industries Board had interpreted "a market price as one established under certain normal conditions." A market with large Government demands was not, in their opinion, normal.

²The plan presented to the wool dealers by the chairman of the price-fixing committee was rather comprehensive. It was his idea that (1) the Government should commandeer the clip and fix the price to be paid, (2) the wool dealers should continue operating as usual and receive a fair compensation for their services, (3) the wool dealers should sell to manufacturers only under instructions from the War Industries Board, (4) the manufacturers should be licensed, and (5) if necessary, standard clothes should be manufactured at a price which would be fixed down through the wholesaler and retailer.

³For such wool as the dealers might have on hand at the time, which could be shown to have cost more than the July 30, 1917, price, the Government agreed to pay an amount equal to the original cost plus 5 per cent.

⁴A series of prices as of July 30, 1917, was drawn up and used as a basis of payment for raw wool. These prices varied from \$1.07 per pound, scoured basis, for common and braid, eastern and territory wools, to \$1.85 for fine delaine (Ohio) wool.

⁵Dealers were forbidden to buy wool directly. They could only accept consignments which after being graded were valued by the Government valuation committee. This committee was made up of representatives of the growers, dealers, and manufacturers. Manufacturers were also forbidden to purchase wool except in the designated distributing centers, and then only with the permission and consent of the Government. Those mills working on Government orders, however, which were located in wool-growing sections not near the centers of distribution, were given permits through the Wool Division of the War Industries Board to buy certain amounts of wool in their immediate neighborhood.

at the July 30, 1917, price minus the cost of transportation to Boston and the compensation to the dealer,¹ and the dealer in turn was to forward such consignments to the United States Government. The profits allowed to dealers were definitely fixed, and varied from 1½ cents for each pound of wool handled for country dealers to 5 per cent on the season's business for dealers in distributing centers.

The effect of wool control.—By the summer of 1918, the War Department controlled the entire supply of raw wool with the exception of that which was in the hands of manufacturers prior to April 5. Soon afterwards approximately half of the active combs, cards, spindles, and wide looms of the country were engaged on Government work. This number increased month by month until November, while stocks of privately owned wool progressively diminished. In October provision was made for taking over the 1919 clip. More and more persistent demands were made by manufacturers that wool be allocated for private orders, but virtually all requests were refused and definite word was given out that no civilian allocations would be made before April 1, 1919. At the time of the armistice, the War Department had accumulated a supply of raw wool sufficient for six months at the war-time rate of consumption.²

These large stocks, together with the uncertainty as to the future price level, were leading to a serious depression in the woolen industry, when at the end of the year the War Department determined to dispose of their stocks through a series of auctions. On January 15, 1919, it was announced that the minimum price acceptable at these sales would be on a parity with the British civil issue price.³ But even this policy on the part of the War Department did not stimulate the woolen industry, and the first four months of 1919 witnessed widespread mill idleness. By April, the period of readjustment had been bridged over and buying at Government auction had been quite spirited. Indeed, by June 1, 1919, 270,000,000 pounds of wool had been disposed of by the War Department, and the prices paid for the better grades virtually equaled the war level.

HIDES, SKINS, AND LEATHER.

Unlike the prices of cottons, woolens, and other forms of clothing, the price of leather, and the raw materials from which leather is

¹ The necessity of concentrating the wool supply near the centers of consumption led to the restricting of distribution to only approved dealers. Approved dealers were those authorized by the War Industries Board to handle wool.

² On Nov. 23, 1918, the statistical branch, General Staff, War Department, reported stocks of 233,867,685 pounds of wool on hand. The total purchases to that date had been 421,373,609 pounds, thus making a total of 187,505,924 pounds which had been sold to manufacturers. There were yet to be delivered on prior purchases 222,000,000 pounds of wool, which made a total of 455,867,685 pounds to be disposed of.

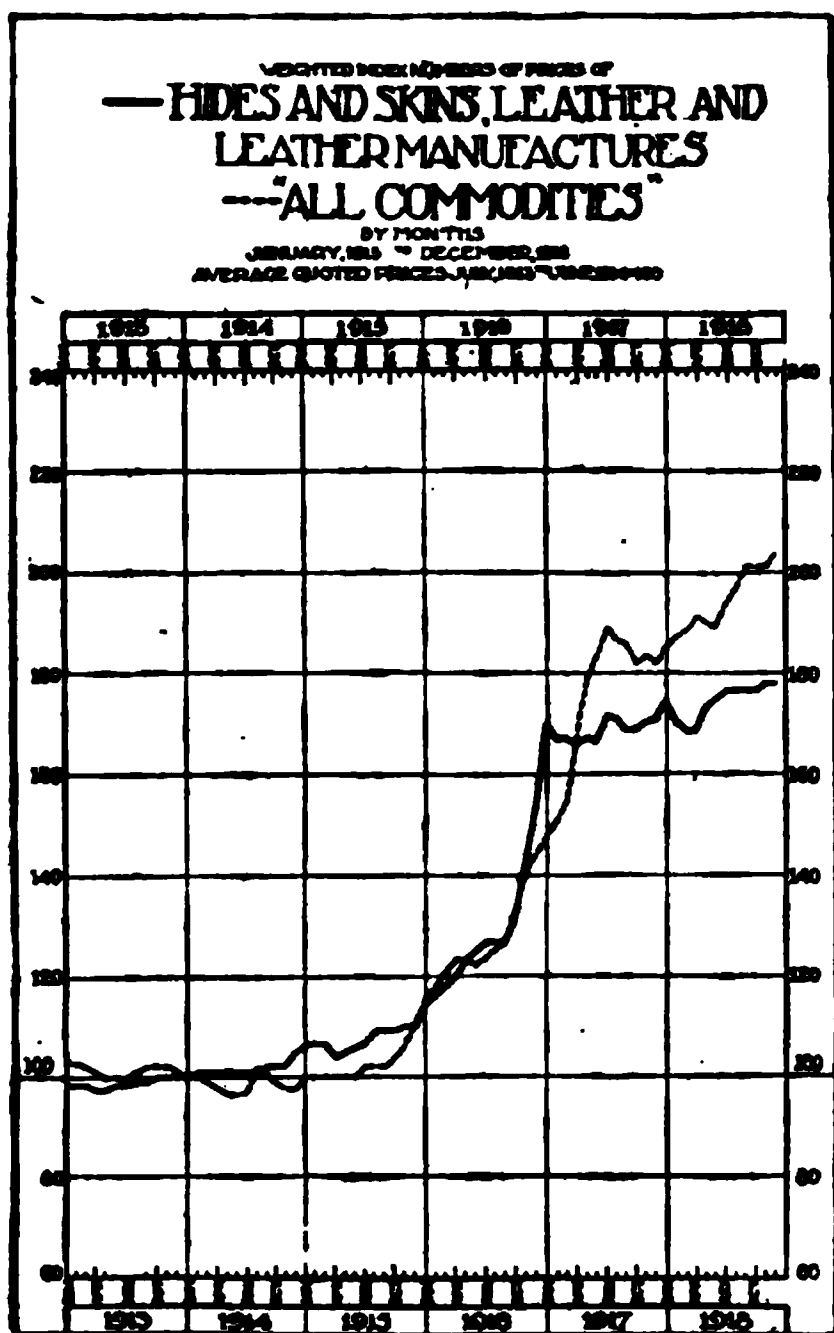
³ For comparison with United States buying prices, see War Industries Board Price Bulletin No. 24, "Prices of Wool and Wool Products," by K. Snodgrass.

made, when compared to the general price level, remained relatively stable during the period of the World War. Indeed, it was only in late 1916, under the influence of heavy allied buying, that any perceptible rise in leather prices over those of commodities in general occurred, and this rise was short lived.¹ During 1917 and 1918 the index number of leather, based upon the 1913-14 average, remained virtually unchanged and at no time did it approach within 15 per cent of the price level of "all commodities." The remarkable stabilization of leather prices that came in December, 1916, in the United States, was the result, curiously, of British price fixing. British control, indeed, which came relatively early, appears to have had a greater influence upon the American leather market than our own price fixing of the summer of 1918.

Leather prices as a whole were at a relatively low level, when the price-fixing committee undertook to fix prices in April, 1918. In the previous month, a price agreement had been made by the War Industries Board with the distributors of sheepskins relative to the price to be paid by the

United States Army for jerkin leather,² but this was nothing more than a long-time contract applicable only to Army orders. It was fear of the effect of several expected events in the leather market upon prices, rather than current high prices, which led to the fixing of hide and skin prices in the spring of 1918.

There were four factors in particular that seemed to threaten instability in the leather market. First, the needs of our growing Army had prompted the Quartermaster Corps to contemplate placing enormous orders.³ This, it was expected, would lead to compe-



Weighted index numbers of prices.—Hides and skins, leather and leather manufactures, and "All commodities."—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

¹The rise experienced in late 1916, appears to have been halted abruptly at the time that the British orders controlling the importation, and fixing of prices for raw hides and skins, went into effect.

²See p. 729.

³In April, 1918, the United States Army placed contracts with American manufacturers for 5,604,008 pairs of shoes, valued at \$40,446,531.

tition for hides and skins in the open market and force prices out of control. Secondly, these large Army orders had to be extended over a series of months and their size necessitated deliveries over relatively long periods. The tanners, then, would need to make purchases of hides extending over long periods. The fixing of the price of hides and skins, in the opinion of the Army purchasing authorities, would lead to greater regularity in the supplying of requirements by eliminating the tanner's risks. Moreover, this stabilization of the price of raw materials, it was hoped, would lead to a more steady market price for finished leather products. Thirdly, the British Government was at this time about to enter the American market for a considerable quantity of leather. The British purchasing commission had already informed the War Industries Board that it was about to purchase \$35,000,000 in value of leather, and it was evident to the authorities that any bid of this size would play havoc with the prices of hides and skins. Finally, there was the shipping situation. The United States has at all times been a large importer of foreign hides and skins. Our receipts for the fiscal years ending June 30, 1917, and 1918 amounted to about 700,000,000 and 432,000,000 pounds, respectively. The shortage of shipping, however, necessitated the cutting off, as far as possible, of dispensable imports and the United States Shipping Board was about to recommend a three-month embargo on the importation of all hides, skins, leather, and manufactures, excepting such cattle hides as were fit for Army use.¹ This action, it was believed, would bring chaos to the leather market, and result in erratic rises unless some steps were taken immediately.

Cattle hides.—The price fixing committee, with these points in mind, met on April 26, 1918, with representatives of producers, importers, and distributors of hides and skins to fix prices for their products. A schedule was presented by a committee representing the industry, in which the price fixing committee was asked to fix a maximum price for hides and skins equal to the average market level for the period April 1 to 24. This average was approximately 10 per cent higher than the current market quotation, and the price fixing committee objected on the ground that its acceptance would

¹ The final report of the hide, leather, and leather goods division of the War Industries Board (December, 1918) states:

"In cooperation with the Shipping Board for the releasing of tonnage, and with the Food Administration, restrictions on imports were agreed to which deprived the industry of about 10,000,000 hides and kips and about 90,000,000 goat and sheep skins, the tonnage allowed for leather raw stock being confined entirely to requirements for war necessities.

"The final restrictions which practically limited importations of raw stocks to certain heavy hides from South America, to hides coming by rail, and to hides coming as back haul from Europe, went into effect June 15."

mean raising the existing price, and this they said was contrary to their policy. The live stock producers also took issue with these suggested prices; not, however, on the ground of its fairness. It was their contention that price fixing in any form, was unnecessary and that in their opinion no emergency existed which warranted any Governmental interference.¹

The price-fixing committee overruled the objections of the live-stock producers and on April 30, 1918, fixed maximum prices for all the stocks of domestic hides and skins in hand at that date; for the domestic take-off for the months of May, June, and July; and for all imported hides and skins shipped from ports of origin to and including July 31, 1918.²

The practicability of these fixed prices was doubted by members of the leather industry when the time for revisions approached. On July 19, 1918, 12 days prior to the expiration of these prices, the industry was called together in order that action might be taken relative to their continuation or revision. Complaints were made by some against the agreed prices, and indeed, it was contended that the price-fixing committee had put an artificial price upon hides and skins. It appears that the better grades of hides were being taken by the Government at the maximum price, thereby keeping their value up to the figure agreed upon in April, while the cheaper grades, for which there was little demand, never reached the fixed maximum. The price-fixing committee recognized the logic of this contention and suggested that the price for the following three months be lowered. But at this point the packers and the live-stock producers objected on the ground that the changing of hide prices at that particular time would inject an element of doubt into the cattle market and check the stocking up with feeder stock then in progress.

The price-fixing committee, however, held to its belief, and after the appointment of a body made up of members of the trade and the price-fixing committee to draw up a price schedule, fixed a

¹ See minutes of the price fixing committee, June 26, 1918.

² Two sets of prices were actually fixed—one to apply to stocks and take-off up to and including Apr. 30, 1918, and the other for the May, June, and July take-off. Hides from heavy native steers, No. 1, were used as the base price in both cases and differentials applied for other types. A price of 29 cents per pound was adopted for the stocks and take-off to Apr. 30, while 33 cents was the price fixed for the May, June, and July product. These prices were about 10 per cent higher than the prevailing market prices. As above stated, the price-fixing committee at first objected to this increase of current prices; and in approving of the prices fixed the committee explained its action by stating that the reason for their adoption was the desire to keep the good will of the industry. The hide and skin interests had also suggested a 10 per cent increase on imported hides, but this was not accepted. Indeed the price-fixing committee through the instrument of the import license system, fixed the maximum price of foreign hides and skins similar to those produced in the United States at the same figure that was agreed upon for the domestic product. The complete schedule adopted will be found on pp. 729-752.

maximum price of 30 cents¹ for No. 1 native steer hides to be effective for three months ending November 1, 1918.²

As the end of 1918 approached provision was made for the further revision of hide and skin prices, and on October 23 a new schedule was presented to the trade for the months of November, December, and January. This schedule provided for a still further decrease in prices. The figure for November and December was 1 cent less than the existing maximum price, and that for January was 2 cents lower. This apparent decrease may be explained by the fact that the hides secured from the winter take-off are usually of lower quality than those from the take-off of other months. It was really proposed to continue the fall prices minus a differential to allow for the poorer quality. Here again, however, the packers protested,³ this time on the ground that the differential applied would be reflected in the price of meat. "With the price of hides fixed," they said, "meat would bear the brunt of the fluctuations in the live-stock market." But the prices suggested by the price-fixing committee again were adopted, and 29 cents was made the price for the November-December take-off of No. 1 native heavy steer hides. In spite of the cessation of hostilities the January price of 28 cents also went into effect on the first of that month, but on January 31, 1918, maximum prices of hides expired by limitation.

Sheepskins.—The extraordinary demand for leather jerkins for the use of our fighting forces had sent the price of sheepskins to a level 250 per cent above its prewar average. Since the needs of the Army were sufficiently large to absorb virtually the entire domestic output⁴ it was thought advisable to make some arrangement whereby the governmental authorities might secure an option upon the necessary supply at a fixed price. Accordingly, on March 20, 1918, the chairman of the War Industries Board called the various packers and wool pullers to Washington. As a result of this meeting an agreement was reached whereby the wool pullers promised to give to the tanners of jerkin leather an option on all picked sheepskins at a maximum price of 14 cents per square foot, while the tanners in turn agreed to dress these skins for the United States Government at a fee of 4 cents per square foot. In other words, the Army authorities

¹ This price, it will be noted, was 3 cents lower than the maximum fixed for the preceding months.

² Differentials based upon this 30-cent price were later fixed by the hides and leather section of the War Industries Board. It should be added also that the trade recommended that all dealers and buyers of hides and skins be licensed, but in this the price-fixing committee refused to concur, since they saw no especial benefit to be derived therefrom.

³ See minutes of the price-fixing committee, Oct. 28, 1918.

⁴ The estimated production of pelts of the type used in making leather jerkins was 1,000,000 per year. Of these the Army took an average of 75,000 per month, or 900,000 per year.

really contracted to take over all pelts at a fixed price for the period ending June 7, 1918.

The renewal of this contract at expiration was not considered desirable, and it was thought advisable rather to include sheep pelts with other hides and skins under a system of fixed prices applicable both to governmental and civilian purchasers. The matter was therefore presented before the price-fixing committee, together with a list of prices which had been prepared by the industry and approved by the chief of the hide and leather section of the War Industries Board, and on June 7 a series of maximum prices ranging from 8 to 18 cents per pound was fixed for the various grades of sheepskins¹ for the period ending August 1, 1918. These prices were later extended for the months August, September, and October, and on October 30, after being slightly changed so as to allow for the poorer grade of pelts which came into the market during the winter months, they were further adopted as maxima for November, December, and January.

Tanned leather.—It was evident from the beginning that price fixing in the leather industry would have to be extended to its various fabricated products. Indeed, in April, when maximum prices for hides were first adopted, the price-fixing committee publicly stated that as a matter of policy it would meet with the tanners² "with a view to establishing fair and equitable prices on leather, and would endeavor to see that leather products would reach the consumer at fair and equitable prices."

But the fixing of leather prices was soon found to be a more difficult task than that of determining a price for raw hides. Hides are but a by-product of the packing house, and animals are killed primarily for their meat and not for their hides. The cost of producing a hide, therefore, plays but a minor and indirect part in determining its market price. But with leather certain costs had to be determined, since the selling price is in large part determined not only by the cost of the raw hides plus the cost of manufacture but also by other incidental costs. There is involved, too, the profit of the tanner. The Federal Trade Commission, accordingly, was asked to investigate the cost of manufacturing various kinds of leather.

Harness leather: The first case of price fixing in the tanned leather industry occurred in June, 1918, and was made applicable to the variety used in the manufacture of harness. The informal

¹ The schedule of prices as adopted is to be found on p. 788.

² In the case of harness leather, the Army price, which had been fixed by informal agreement in January, 1918, may be considered as an early attempt to fix the price of tanned leather. But here, also, as with the agreement pertaining to sheep skins for Army jerkins mentioned above, what really existed was a long-time contract, little different from any other commercial agreement extending over a fixed period.

price agreement entered into by the Army and the producers of harness leather was about to expire, and the establishment of a definite maximum price for all purchasers was considered preferable to the extension of the Army option. The Federal Trade Commission, moreover, had collected sufficient cost data to warrant the fixing of a fair maximum price for all consumers. On June 25, therefore, the price-fixing committee in agreement with the producers fixed the maximum price for all weights of black harness leather "going either to the Government or into civilian outlets, to be effective until November 1, 1918, at 70 cents¹ per pound for grade A." This price was subsequently extended to December, at which date it was allowed to lapse.

Sole and belting leather: It was not until the middle of July, 1918, that the question of sole-leather prices was taken under consideration by the price-fixing committee, and even then, because of lack of sufficient cost data, no definite action was taken. The chief of the hide and leather section of the War Industries Board had recommended the regulation of the tanners' profits as the only effective method of fixing the price of sole leather. Since this was a radical departure from the former policies of the price-fixing committee,² the matter was laid aside for further investigation. Shortly afterwards a committee representing the tanning industry submitted a report on the cost of tanning sole leather and suggested that 13.5 cents per pound be used as the tanning cost basis in determining maximum prices. This figure they claimed netted them a return of 10 per cent, and since they averaged but one turnover per year on their investment, an allowance of 13.5 cents for tanning would make their profits equal to 10 per cent per annum. Although the cost data of the Federal Trade Commission showed 12 cents as a fair average figure for tanning costs, the price schedule of the tanners was accepted as the basis on which prices were fixed, and on August 8, 1918, maximum prices on belting and sole leather were announced by the price-fixing committee.³ These prices were to become effective immediately and were to continue until November 9. On October 28, at the request of the tanning industry, they were extended to December 8. The need for their further continuation having been removed by the signing of the armistice in November, maximum prices of sole and belting leather were not renewed after their expiration on the latter date.

¹ This price was substantially the same as had prevailed on the open market during the preceding half year. Other prices were fixed for the different varieties of harness leather, and these too showed virtually no change from the current market quotations.

² The policy of determining a fixed price on the basis of return upon the investment in a given industry, although untried during the early months of the régime of the price-fixing committee, was later applied very frequently. Such was especially true in the case of cotton fabrics and chemicals (see pp. 298 and 338).

³ A complete schedule of sole and belting leather prices will be found on p. 750.

Upper leather: With the prices of hides and skins, harness, sole, and belting leather fixed, there still remained the task of determining maximum prices for upper leather. The lack of sufficient cost data and the proposed inauguration of a system of price fixing for shoes delayed the adoption of a fixed price schedule for upper leather, however, and it was only within 10 days of the signing of the armistice that any definite action was undertaken. Before the prices adopted had been announced, hostilities had ceased, and on November 22, 1918, the price-fixing committee notified the trade that there was no longer any necessity for putting the agreed prices into effect.¹

Summary.—The control of prices in the hide and leather industry began with the control undertaken by the British Government, which was first instituted in December, 1916. This was followed by central allied purchasing upon the part of all the allied Governments even before the United States entered the war, and was afterwards continued by central allied purchasing and allotment. Under the British control of importation and the British allotment of hides and skins and leather to war industries prices were established first upon the raw hides and skins, soon after upon leather, and to a considerable extent upon leather manufactures. The control of hides and skins prices was complete, the control of leather prices extensive, and the control of leather manufactures extended to shoes, both Army and civilian, and all other items of leather manufacture which entered into British and other Army contracts.

The American control of these commodities followed in general outline the methods already laid down by the control exercised under the British Government. It differed mainly in that the necessity for control was not so materially apparent in America, and that the control over leather and the manufactures of leather never extended far beyond the field of Government purchases.

Indeed, at the signing of the armistice price fixing had not advanced beyond raw hides and skins and several intermediate products, such as sole, belting, and harness leather,² and even the maximum

¹ The prices adopted were based on a 6 per cent return on the investment of the tanners and had been submitted to the price-fixing committee by the hide and leather section of the War Industries Board. The trade, however, objected at first to the limitation of their profits to 6 per cent and contended that because of the risks entailed due to unexpected changes in style, etc., they were entitled to at least 8 per cent. This return, in the opinion of the price-fixing committee, was much too large, for the cost data submitted by the Federal Trade Commission showed a turnover of $2\frac{1}{2}$ times per year; and on such a basis a return of 8 per cent meant an annual profit of 20 per cent. The figure finally agreed upon (which never was put into effect) was based on a 6 per cent return.

² Had the war continued, an elaborate system of price fixing extending not only down through the various fabricated products, but also to the ultimate consumers, might have been put into effect. The plans of the War Industries Board provided for the elimination of all unnecessary styles and the establishment of a system of price classification for each grade of shoes. Provision was also made for a system of manufacturers' serial numbers, which would have enabled purchasers to ascertain both the name of the manufacturer of any shoe and the price at which such shoe ought to retail.

prices applied to these were never, in many instances, reached on the open market.¹

MANILA FIBERS AND HEMP.

The extraordinary needs of the United States Navy and the United States Shipping Board for rope and cordage of all varieties, made significant the rise in the price of manila hemp during 1917 and 1918. The United States Government by the middle of 1918 was consuming virtually all the manila rope manufactured in the United States, and as our demands increased, speculation grew. Indeed, our entrance into the war stimulated speculation within the trade to such an extent that by June, 1917, manila hemp was selling for 24 cents per pound, or approximately 207 per cent above the 1913-14 level. The price continued to rise through the second half of 1917 and in January, 1918, reached \$0.2856.

It was evident that this condition could not be allowed to continue, especially in view of the growing demands of our new merchant fleet, and in late March, 1918, the War Trade Board undertook to regulate the price of manila hemp. It relied upon its power of controlling exports from the possessions of the United States as the machinery for enforcing the prices adopted. Manila hemp was, therefore, placed on the restricted list, and after March 31, 1918, no shipments from the Philippines, either to the United States or other countries, were allowed without permits or licenses from the War Trade Board. With the exports of manila hemp subject to license requirement, it was relatively simple to add conditions to be met before an export license could be secured. One condition stipulated was that "persons desiring to ship hemp or manila fiber from the Philippine Islands, whether to the United States or elsewhere [had to] show to the satisfaction of the War Trade Board or its representative, by affidavit or otherwise, that the hemp or manila

¹ This was especially true of hides and skins, as shown in the following table:

Fixed and quoted prices of cattle hides.
[Averages.]

	Packer.			Country.			Imported.		
	Fixed price.	Quoted price.	Per cent quoted to fixed.	Fixed price.	Quoted price.	Per cent quoted to fixed.	Fixed price.	Quoted price.	Per cent quoted to fixed.
1918.									
April.....	\$0.2412	\$0.2123	88	\$0.1867	\$0.1550	84	\$0.3300	\$0.3198	97
May, June, and July.....	.2912	.2837	97	.2817	.1855	77	.3300	.3290	100
August, September, and October.....	.2688	.2688	100	.2133	.2096	98	.3270	.3263	100
November and December....	.2588	.2588	100	.2108	.2079	99	.3270	.3250	99

fiber covered by the application for a shipping permit or export license" had been bought at a certain price in accordance with a schedule prepared by the War Trade Board.¹ Moreover, in order that the price of fibers might be controlled after they were landed in the United States, a further condition was added requiring the consignment of all such shipments to the Textile Alliance for the account of whomsoever the shipper might designate.²

The price fixed for the standard grade of hemp was 17 cents per pound f. o. b. Manila, or about 25 cents at New York. This price, though slightly lower than the current market figure, was admittedly high. It was made high, however, in order not too seriously to prejudice the interests of the many importers, manufacturers, and producers by a "precipitous price adjustment."³ It was to remain in effect for four months. As the end of that period approached, the War Trade Board asked the price fixing committee to take over the regulation of manila fiber and hemp.⁴ A lower price than that fixed in March was recommended, and on July 24, 1918, the price fixing committee fixed a price of 14 cents per pound for grade "I Current" manila fiber f. o. b. Manila. This price was temporary, however, since there had not been time to secure sufficient basic information from the trade. It was to be effective until August 31, before which time further details relative to an appropriate price could be secured from the Governor General of the Philippines and the various consumers.

Neither the fixing of the price of these fibers nor the figure adopted appear to have pleased the native growers, for immediately complaints were heard. Both the Philippine Legislature and the agricultural interests asked for the removal of price control, and to their requests was added that of the Governor General. Accordingly, when the time for the expiration of the fixed fiber prices approached, the price fixing committee decided not to renew them, and on August 31 manila fiber and hemp prices expired by limitation.

BURLAP.

The abnormally high price of burlap resulting from the flagrant speculation which took place in 1917 and 1918 in India, the United Kingdom, and the United States, led, in the fall of 1918, to an order

¹ This schedule, which used as a base the price of grade "I Current" manila hemp, is published on p. 705 of this volume. Prices were fixed for the various types of fiber both at Manila and at New York.

² Exception was made, however, in the case of shipments to the United States Government. The Textile Alliance in turn released such shipments to the ultimate consignee only upon receipt of a guaranty that all regulations governing trading in hemp in the United States would be abided by.

³ See minutes of price-fixing committee, July 24, 1918.

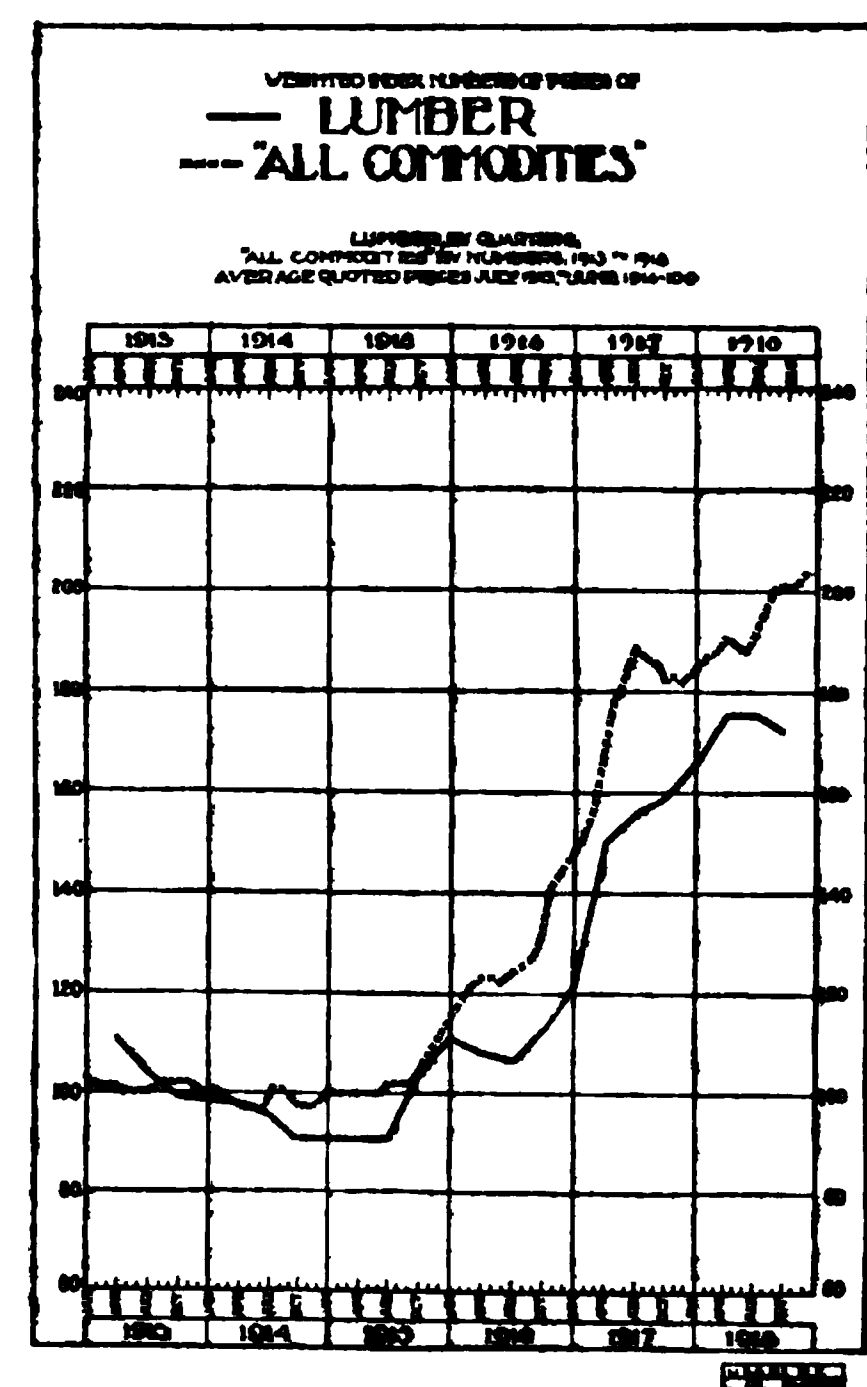
⁴ The Philippine Islands being a possession of the United States, it was felt that the price-fixing committee had authority to fix prices there.

of the War Trade Board which prohibited the private importation of all burlap unless under order of the War Industries Board. Action was also taken relative to the lowering of the price of burlap; and the members of the trade, anticipating that prices would be decreased as a result of negotiations entered into between the Governments of the United States and Great Britain, entered into a voluntary agreement with the War Industries Board whereby the price of 40-inch,

8-ounce burlap was fixed at Pacific ports at 13.6.¹ Burlap-bag prices were also fixed on the above basis f. o. b. factory plus the cost of manufacture and a margin of 5 per cent. This agreement applied to all contracts entered into prior to October 4, 1918, and expired shortly after the signing of the armistice.

LUMBER.

Southern yellow pine.—The demand for over a billion feet of lumber for the construction of cantonments confronted us immediately after the outbreak of war. Although the ultimate supply of structural timber in the United States was far in excess of the Government requirements, the prompt delivery of so large an order threatened to put an unusual pressure on the lumber mills



Weighted index numbers of prices.—Lumber; and "All commodities."—By quarters, 1913 to 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

and to send prices quickly upward. The brunt of this heavy order was to fall on the southern yellow-pine mills, for the southern pine was not only the leading construction timber in times of peace, but the location of the pine forests near the many cantonments in the South and West gave it the preference over the distant Douglas fir of the Pacific coast and over the scanty stands of hemlock and eastern spruce. The first step in the creation of our war machine therefore depended upon the southern pineries, and the first great problem of price fixing arose in connection with that species of lumber. The Government was forced to commence the work of regulating

¹ Other prices which were fixed for various weights of burlap at the different ports will be found on page 679.

lumber prices by the very necessities of the hour—the securing of the raw materials for our training camps without delay. It was evident that if the individual contractors each attempted to secure the lumber needed for each cantonment in the open market through the medium of the various middlemen and wholesalers, lumber prices would shoot upward under the stimulus of this exceptional demand. The rise in prices, however, would have been the lesser evil. The lumber industry is intensely competitive and the thousands of mills would have bid strenuously against each other to secure the Government business with the result that the cantonment orders would have gravitated to the largest mills, or to the mills offering the greatest price concessions, thus giving some mills more orders than they could fill immediately while other mills had no Government business at all. Thus the necessity of price fixing grew out of the need of apportioning orders between all the lumber mills in accordance with their productive capacity and their proximity to the cantonment sites.

As a basis of price fixing nothing short of pooling of the entire southern yellow pine industry was necessary, and the committee on lumber appointed by Mr. Baruch in April, 1917, to act under the Raw Materials Division of the Council of National Defense instinctively recognized this fact. The lumber committee at once called representatives of the southern pine mills to Washington, and at the instigation of the lumber committee these private lumber men went home to form emergency lumber bureaus that would have power to represent each branch of the southern pine industry. These southern pine associations were quickly organized and men empowered to represent the southern pine industry almost immediately began to hold conferences with the lumber committee in regard to the establishment of a uniform price of yellow pine lumber for Government cantonment requirements. Finally, on June 13, 1917, the average price of \$20 a thousand board feet for cantonment stock, which was equivalent to \$23.20 for the run of the mill, was set by voluntary agreement between the Government and the lumber men. This price was not based on a study of costs, but, inasmuch as the price allowed was higher than the market price of \$17 a thousand which prevailed earlier in the year, it was believed by representatives of the Federal Trade Commission to allow a fair margin to cover the increasing costs of producing lumber. By dealing directly with the industry itself the Government did away entirely with the interposition of middlemen and thus saved the wholesalers' profit.

Under the informal price agreement 52,000 carloads of southern yellow pine or over a billion feet of lumber were delivered between June 15 and September 15, 1917. By apportioning orders through

the emergency pine bureaus to the individual mills on the basis of their productive capacity and proximity to each cantonment all the the mills quickly turned out the quotas assigned to them, and by fixing the same price for all the mills none were tempted to secure more than their share of orders by cutting prices. A voluntary reduction of from 50 cents to \$1 a thousand board feet in the price of southern pine was made on September 11, but there was no further price fixing until the appointment of the price-fixing committee of the War Industries Board in March, 1918.

The effect of the control of the prices of southern yellow pine was communicated to the prices of other woods, such as Douglas fir and hemlock, which are normally used for the same purposes and which follow the lead of southern yellow pine under normal market conditions. Thus the direct agreement as to the prices of southern pine indirectly brought these other woods under the influence of the price-fixing power long before their prices were formally fixed.

During the interval between the informal price agreement in June, 1917, and the first action of the price-fixing committee in March, 1918, prices to the general public which were not covered by the agreement were steadily increasing as a result of the increasing costs of producing lumber until in May, 1918, they ranged from \$5 to \$7 a thousand higher than the prices paid by the Government. This disparity in prices as well as the rising costs prompted the new price-fixing committee of the War Industries Board on June 15, 1918, to fix a new price for southern yellow pine of \$28 a thousand board feet, applicable to both Government and civilian purchases, which represented an increase of \$4.80 over the price first set. The new price was based on a cost investigation by the Federal Trade Commission and was lower than the price contended for by the lumbermen, who claimed that the value of stumpage should be computed at its present market value instead of at its original cost.

No further increase in the prices of southern yellow pine was allowed by the price-fixing committee despite the fact that the constantly increasing cost of producing lumber made the prices that went into effect on June 15, 1918, less and less profitable. The question as to advancing the prices of yellow pine was discussed when the time limit—September 15—of the fixed prices was reached, but the same prices were ordered to be continued in effect until December 23. The reason for this rigid policy was to be found in the desire of the Government to curtail the production of lumber, after the peak of Government demand had been satisfied. By the latter part of 1918 normal building operations had fallen to a very low ebb, and there was a surplus of ordinary building materials on the market. Consequently there was no necessity for stimulating production by offering higher prices; on the contrary it was necessary

to release part of the labor and capital employed in the building industries by curtailing the production of such material. One means of curtailing production was to keep prices fixed below the cost of production of some of the marginal mills, and thereby to cause their withdrawal from production.

Other softwoods.—The price control of southern yellow pine was the dominating feature of the Government price fixing of lumber. While the price of southern yellow pine can not be regarded as the base price for all other softwoods, the prices of other woods were nevertheless closely related to the prices of that major species. North Carolina pine is but a trade name for a species of southern yellow pine and its fixed price conformed closely to that of the other yellow pines. The price of Douglas fir, first fixed on March 19, 1918, was set lower than that of yellow pine, ranging from \$10 a thousand for No. 3 to \$19 a thousand for No. 1. The difference in the fixed prices of yellow pine and Douglas fir corresponds to the differences in the two industries. Douglas fir occurs in dense stands on the Pacific coast where its supply is great—760 billion feet—and its demand relatively small in the locality where it is produced; southern pine has reached its crest and is waning in supply while the demand for it from the nearby centers of population in the South, East, and Middle West is constantly increasing. Douglas fir competes on even terms with southern pine in the markets of the Middle West, but in order to attain that parity it must pay the heavy freight charges on the long haul from the Pacific coast and consequently its price on the Pacific coast is lower than that of pine in the Gulf States. The cost of producing Douglas fir is also lower than that of southern pine because Douglas fir is cut by large mills that operate in tremendous stands of timber, while southern pine is cut by smaller mills with higher costs. A further reason for the relative cheapness of Douglas fir as compared with southern pine during the war is to be found in the high prices paid for special grades of Douglas fir for ships and airplanes, which entailed the production of a large “side-cut” which could be used for construction purposes. While the actual price of Douglas fir was thus lower than that of southern pine, however, its relative increase in price over the prewar level was even greater than that of its rival.

The prices of Pennsylvania hemlock, first fixed on May 9, 1918, conformed closely to that of southern pine because it was used for the same general purpose of construction. Eastern spruce, which is used for building to some extent, was given a considerably higher fixed price than southern pine. Spruce is a preferred wood for many purposes, notably for paper pulp, and its price as a building material must be high enough to equal its value in these alternative uses. The car shortage during 1918 shut out southern pine from the

New York market, and spruce could consequently be sold for general building purposes at a much higher price than that fixed for pine. Western spruce was in great demand for the wings and beams of airplanes, but the quality required for this important purpose was so high that only about 10 per cent of the total production met the tests. Since there was but small demand for the "side-cut" it was necessary for the Government to pay for the airplane stock at a rate that would make the cutting of the wood profitable, even although little was received for the "side-cut." In this case, the Government stimulated the production by paying a relatively high price, but this was an exception to the general rule.

Hardwoods.—The number of species of hardwoods is so great, the conditions of production between the various species and even between the same species in different States are so diverse and the special uses which give each of these species a special market are so varied in normal times that there is no consistent price structure between the hardwoods as there is in the case of softwoods under the leadership of Southern yellow pine. The Government had urgent need of certain grades of some hardwoods for specialized war purposes, and it bought practically the entire supply of these choice grades. Walnut for gunstocks and airplanes was the premiere wood of the war, justly called the "Liberty tree"; mahogany for airplane propellers was an important supplement to walnut; locust for tree-nails was an essential for wooden ships, while ash and hickory for handles and vehicles, oak for airplane propellers and artillery wheels, and birch for airplane ply-wood all did their bit in the military program. The Government did not fix the price for any of these woods, but since it established a fixed schedule for its own purchases, and since it was practically the sole purchaser in the case of walnut, locust, and mahogany, its action virtually amounted to price-fixing. The prices paid by the Government for these special grades were relatively high in order to cover the entire cost of production, including that of the lower grades of wood for which there was no immediate market and in order to stimulate the production of vital war material to the maximum. The market prices of the lower grades of the war woods, and the market prices of woods not used in the war—in sharp contrast to the prices of walnut, mahogany, and locust—were low. The prices of hardwoods in general did not rise as rapidly as the softwoods or as the prices of all commodities. The demand for furniture and for other wood products had dwindled to a very low ebb during the war, and hardwood logs that were cut as a by-product of other logging operations were constantly sold at relatively low prices. In view of the peculiar differences that exist between hardwood and softwood markets, however, the difference

in the prices of softwoods and hardwoods can not be attributed to the fact that the prices of most of the softwoods were fixed while the prices of the hardwoods were uncontrolled.

BUILDING MATERIALS.

Prices of the basic building materials were fixed during the war, but the scope and effect of price control varied considerably with the different building materials. The price of the lumber that was used for constructing cantonments, ships, and aeroplanes to the extent of 20 per cent of the total annual production was controlled by the Government from the beginning to the end of the war for most of the important kinds of lumbers and for both Government and private purchases. The price of the Portland cement that was an important material for a great variety of construction work from Government buildings to fortifications and even ships was fixed for Government purchases at the important producing centers. The price of structural steel, in common with all other kinds of that vital war material, was fixed in all markets by the Government. The prices of other building materials such as common brick, hollow building tile, sand, gravel, and crushed stone were controlled only in localities where there was a large volume of Government construction work. This last-named group of building materials was in heavy demand only in the congested district of the East, and the price control there exercised in behalf of Government purchases had only an influence upon local prices. The prices of 33 building materials that consisted of partly manufactured products of the basic building materials such as metal lath, metal-corner beds, etc., were not directly controlled at all.

Price fixing in the field of building materials had certain distinguishing characteristics in spite of the wide dissimilarity in the commodities composing this group. These attributes of price control in construction materials may be noted under four main heads. The last head is not peculiar to building materials.

1. The prices of building materials were not fixed at a level that would stimulate production but rather at a level that would actually curtail the output of materials for construction. Since the volume of private building in 1918 had dwindled to 20 per cent of its normal physical magnitude and since the combined construction program of all the Government departments was not over 25 per cent of the nation's normal building operations there was no necessity for increasing the production of the raw materials for building. In fact private building was regarded as nonessential during the war, and every effort was made by fuel curtailments, refusal to grant priorities for cars, etc., to discourage normal building. The result of these Government restrictions combined with the high prices of building

materials was to reduce the demand for new building faster than the manufacturers of building materials could curtail production. The Government consequently had no difficulty in securing sufficient supplies of the common building materials, because the plant capacity for producing these was far in excess of the reduced demand. In fixing prices the policy was accordingly adopted of allowing the producers of building materials such a price as would yield them only a normal return on their investment. Where the normal return on the investment was low on account of keen competition—as it usually was in the building materials industries—only a low return on the investment was allowed. Thus the prices fixed on common brick allowed an average net return of only 3.76 per cent, and the cement prices yielded 6 per cent on the investment. It also happened that lumber prices fixed on the cost of production of March, 1918, were not increased later in spite of advancing labor and materials costs. The Government thus held down the prices of building materials because the production was in excess of all essential war needs, and it was desirable in the interests of war conservation to enforce a price so low that it would actually close down the marginal plants. The effect of this low-price policy is shown by the fact that the average price of lumber and the average price of cement increased only 73 per cent between 1913 and the end of 1918 as contrasted with 102 per cent for all commodities.

There were a few exceptions to the policy stated in the foregoing paragraph. Structural steel shared the high prices allowed to stimulate steel production, but nevertheless the use of structural steel was curtailed wherever possible so that its rise in price was due entirely to its relation to other steel and not to a demand for it for building. The prices paid by the Government for certain rather scarce woods such as walnut, mahogany, locust, etc., were purposely made high in order to stimulate their production.

2. Price fixing in the building industries had for one of its main objects the stabilizing of the industries. Industries producing building materials were accustomed to compete most strenuously within their own ranks and with each other. Southern pine lumber combatted Douglas fir lumber, hemlock, and spruce; North Carolina pine competed with Georgia and Alabama pine; the small mill competed with the larger in the same territory; while all the lumber mills fought cement and brick. This price competition while entirely satisfactory to the consumer in times of peace was unsatisfactory to the Government in times of war, because it meant irregularity of production, delay in placing orders and competition between Government departments. The Government always preferred to deal with one central body representing the whole trade that could guarantee large deliveries and allocate the orders fairly be-

tween its members. Only by fixing a stable price for the entire industry would the temptation for rival mills to secure business by cutting prices be entirely avoided. The paramount necessity was to secure unity of action among the trade to win the war and to avoid the wastes and delay of competitive strife.

The result of the price-fixing policy was thus to solidify industries. Every important building-material group patched up their internal differences for the time being and appointed a war-service committee to represent the entire trade. This war-time concentration will leave lasting impressions. The rise of the National Lumber Manufacturers' Association, the formation of an association of brick manufacturers can be directly traced to the war. Price stabilization inevitably fosters the industrial combination that is necessary to sustain a stable price. In this respect price fixing of building materials was no different from price fixing in any other field.

3. Notwithstanding the tendency toward a uniform price policy, the fixed prices of building materials varied more from one locality to another than almost any other group of commodities. While the prices of lumber and steel were fixed at single base points, the prices of sand, gravel, and crushed stone were fixed differently in each locality, fixed cement prices varied at 40 different producing points, and common brick prices varied in the 16 zones in which Government purchases were made. These variations are to be attributed to the fact that brick, cement, sand, gravel, and crushed stone are produced near the locality where they are consumed, being too cheap in proportion to their bulk to be transported far. Consequently the market for these bulky articles is a local one and the price is determined by the local cost of production and the local demand. In fixing prices each producing center accordingly had to be separately considered. This was especially true of brick, sand, and gravel. While cement prices differed considerably, there was still a common price structure with fixed differentials.

4. A common result of price fixing is standardization. It is essential in fixing a uniform price that the grade and quality upon which the price is fixed does not vary, for otherwise the value received will vary in spite of the fixed price. If the goods are not already standardized, they must be reduced to uniform types before the prices can be fixed. Basic raw materials are usually standardized and lumber, steel, and cement were already gauged by certain definite mechanical tests. The sizes and quality of common brick, however, varied greatly and one of the causes of variation in brick prices was the difference in size and quality. The act of fixing the prices of common brick stimulated a movement toward standardization and this may be one of the lasting results of fixing the price of bricks.

Portland cement.—Portland cement ranked next in importance to lumber as a war building material. Its use in armories, barracks, gun placements, trench linings, bomb-proof shelter, incinerators, munition factory buildings, warehouses, barges, and reinforced concrete ships gave cement prominence in the war program as early as April, 1917, and the congestion of Government orders at certain points along the Atlantic seaboard threatened to cause local shortages of cement and sharp rises in cement prices in the districts of heavy Government demand. The production of cement for the country as a whole was ample for the increased requirements of war even without drawing upon the excess productive capacity of the cement mills. In fact the declining consumption of cement that resulted from the curtailment of normal building operations had more than offset the new orders from the Government. Since Portland cement is a bulky commodity, however, it is not profitable to ship it far from the mill, and since the limestone and coal that are the chief materials used in its manufacture are widely distributed throughout the United States, conditions have been favorable for the establishment of cement mills in nearly every State. Each cement mill thus enjoys a local monopoly, the radius of which is determined by its cost of production and by the proximity of other mills. The cement mills of the South which possess an abundant supply of a limestone almost ideal for cement making, joined to a cheap supply of coal, can produce cheaper and send their product farther than the mills near New York City, which possess fewer advantages in respect to raw materials. Nevertheless the proximity to the great centers of population enables the mills in New York and the Lehigh district in Pennsylvania to offset the advantage of the southern mills and allows them to hold the markets in the big cities against their southern rivals. Thus the cement industry is split up into many local markets which are connected by a series of price differentials, but which nevertheless enjoy a large measure of independence. It is therefore possible for local shortages of cement to exist in some communities, notwithstanding the existence of an oversupply in other communities, and this is particularly true when the tremendous concentration of war goods pouring towards the Atlantic seaboard strained the normal means of transportation and put an embargo on bulky goods. To secure an adequate supply of cement for the Government it was therefore necessary to allocate the supply and to fix the prices at the points of congestion.

The Portland cement industry had a large degree of cohesion before the war for the purpose of pushing the sale of cement in competition with lumber, brick, and stone, although the price competition between the various cement mills had bordered on the cut-throat variety. This organization nevertheless facilitated the quick appoint-

ment of a "cooperative committee on cement" under the Council of National Defense on April 21, 1917. This committee, composed of representatives of the industry and of the Government at once began to act as a clearing house for assembling trade information preparatory to advising the committee on raw materials of the Council of National Defense as to available supplies and prices of cement. While this committee was acting, many purchases of cement were made by the Army and the Navy at no definite price, but with the understanding that a fair price was to be fixed later. On December 18, 1917, the first committee was dissolved and a war service committee on Portland cement was organized. No prices were fixed, however, until the price-fixing committee in April and May, 1918, after an investigation of costs by the Federal Trade Commission fixed prices for the Army and Navy purchases for the six-months' period ending December 31, 1917, the four-month period ending April 30, 1918, and the four-month period ending August 31, 1918. Later on, August 23, 1918, the price-fixing committee established prices for the four months ending December 31, 1918. The prices set for 1917 applied only to Army and Navy purchases and they became effective when accepted by the industry and the purchasing departments. This first price list, which has a retroactive effect, covered 30 different producing points, and the prices varied from \$1.30 a barrel in Texas to \$1.90 a barrel in California. The second price list applying to all Government purchases for the first four months of 1918 was the same as the first. The third set of fixed prices for the four months ending August 31, 1918, marked an advance of as high as 45 cents a barrel for the low-cost mills, dropped prices on some of the high-cost mills in the Pacific coast States, and reduced the maximum variation in cement prices to 35 cents a barrel and the average variation to about 20 cents a barrel. The fourth price list for the four months ending December 31 was virtually the same as the third price list, except that the prices did not include bin inspection and a reduction of 3 cents a barrel was made for the value of that service.

The chief results of the price fixing of cement were to prevent a rise in price at a few congested points along the Atlantic seaboard and to facilitate the prompt delivery of cement on Government orders by eliminating price cutting with its attendant waste, confusion, and irregular production. The main current of cement prices throughout the country as a whole was not substantially affected. Only 11,813,076 barrels of cement were allocated at this fixed price during 1917 and 1918 out of a total production of 92,814,202 barrels in 1917 and 71,632,000 barrels in 1918.

The price of Portland cement to the general public was never fixed, and this ranged about 30 cents a barrel higher than the price

fixed to the Government. Price fixing leveled up market prices to some extent thereby giving the low-cost mills large profits, while limiting the marginal mills to a low return. The concentration of production at the largest mills equipped with the most modern machinery would have enabled the Government to have fixed cement prices at a lower level, but the pooling necessary to bring this about involved too many practical administrative difficulties to justify the adoption of this policy. The prices fixed in 1917 yielded the cement industry as a whole 12 per cent on its investment, and of course individual mills reaped a much higher rate, but subsequent price fixing reduced this margin to 6 per cent merely by maintaining the status quo in the face of advancing costs. The general supply of cement was so ample, as compared with needs, that the Fuel Administration on April 13, 1918, reduced the fuel allotment of the cement mills to 75 per cent of normal on the theory that part of the fuel used in the cement industry could be better employed in other war industries. There was consequently no occasion for stimulating cement production by high prices, and the lowering of the margin of profit for the purpose of curtailing production was entirely justified. Cement prices rose in the open market less than any other basic building material during the war, and the reason for price fixing in the field of cement is to be found in the desire of the Government to prevent the stimulation of prices which its own large demand would normally have caused in certain congested building areas.

Common brick.—The markets for common brick are confined to points near the localities where brick is made, and consequently questions of supply and prices vary in the different localities. The demand for common brick for both Government and civilian use during the war declined to probably one-fourth of normal, or to a greater extent than was the case of other building materials except stone. A shortage developed, however, in a few of the large eastern cities in the congested building districts, and prices for brick were there established on all Government orders. The price of common brick in New York, Philadelphia, Baltimore, and Washington was the first to be formulated; the other prices were not announced until after the armistice, but they had a retroactive effect and applied to all purchases made at tentative prices. Prices fixed by the Government for light-burned common brick varied from \$9 a thousand brick in Chicago to \$15.50 a thousand brick in Philadelphia. These differences were, in some instances, due to variation in the size and quality of the brick, but in most cases they were due to differences in the local market. Thus the supply of brick in New York average a price of \$9.50 per thousand, which was originally fixed for the period ending October 31, 1918, for the accumulated stock left over

from 1917, which had been produced on the lower 1917 level of cost. The Philadelphia brick of the same general type was fixed at \$6 per thousand higher in price because the Philadelphia brick was produced during 1918 when labor was high, due to the competition of the shipyards. The Philadelphia brick was also larger in size and of somewhat better quality than the New York brick, but this does not fully account for the difference. It is probable also that a larger marginal profit was allowed the Philadelphia brick producers than to the New York brick men; for the price-fixing committee in general adopted the policy of fixing prices so that producers would receive their prewar level of profit. The profits of the New York brick makers were very low before the war because of the keen competition of the brick men along the Hudson River. The price-fixing committee allowed the brick men, as a whole, only 3.76 per cent on their investment. The effect of Government price fixing on brick was to enable the Government to purchase brick at slightly below the market price during the latter part of 1918 in the congested districts of New York and Philadelphia. Common brick prices rose very rapidly in the open market during the latter part of 1918. The price fixed for Government purchases, while about equal to the market prices when originally fixed, were considerably below the market by the end of the year. Thus in New York, where the price fixed for Government purchases on light-burned brick was \$9.50 per thousand beginning July 1, 1918, which was subsequently raised to \$10.50 per thousand beginning November 1, the market price rose from \$12.50 in July to \$18 in December.

Government price fixing exerted a definite influence only in the big eastern cities. Only 108,312,229 brick were allocated at Government fixed prices out of a total production of 5,864,909,000 in 1917, and about 2½ billion in 1918. The amount of Government purchases were thus small in comparison to the total common brick output, and as brick sold to the public were delivered at market prices, Government price fixing had no appreciable effect on the average prices of brick throughout the country.

Price fixing, even in the case of brick, however, had a tendency to bring out some degree of combination within the industry. An association of common brick manufacturers was formed on July 26, 1918, which comprised manufacturers producing about 1½ billion brick annually, or about 20 per cent of the normal production. An influence also was exerted in favor of standardization of brick in the different localities; this, too, is an evidence of concentration, but on the whole the brick industry still remained highly competitive and disorganized. A nation-wide control over prices was therefore less effective than in the case of cement, but since brick was of rather

slight importance, however, in the war program this price control was also less necessary here than elsewhere.

Hollow building tile.—Hollow building tile is also a local product whose use greatly diminished during the war. Prices were, notwithstanding, fixed at the principal producing points for the 176,703 tons of hollow building tile used by the Government. Prices were first fixed for the period ending July 1, 1918, and they were later advanced to cover Government purchases made from July 1, 1918, to the period ending December 31, 1918.

Gypsum wall board and plaster board.—The Government requirements for gypsum wall board and plaster board during the war were 100 per cent over the capacity of the plants, and it was necessary to take over the entire output of these materials for Government use and to authorize plant extensions. It also became necessary to allocate orders for Government requirements, and pending the establishment of a fixed price the orders were allocated at tentative prices. On February 27, 1919, the price-fixing committee established maximum f. o. b. mill prices for wall board for two firms at Chicago and for two firms at Los Angeles, and maximum f. o. b. mill prices for plaster board at Chicago, New York, Buffalo, Hampton, Va., Passaic, N. J., Fort Dodge, Iowa, and East Newark, N. J. Since the total production of wall board and plaster board comprised only 10 per cent of the total value of gypsum products, price fixing of these two products had no pronounced effect on the price of raw gypsum. Allocations to the amount of 52,121,060 square feet of wall board and plaster board and to the value of \$956.323 were made at the fixed prices.

Sand, gravel, and crushed stone.—Sand, gravel, and crushed stone are consumed near the localities where they are produced. During the war there was an acute shortage of these materials in the congested district of the East, and it became necessary to fix the price and allocate orders in the Philadelphia, New York, Baltimore, Washington, and Norfolk districts. A total of 2,949,879 tons of sand, gravel, and crushed stone, valued at \$3,009,573, was allocated at the fixed prices. The exact prices fixed on each order in each district are shown in the appendix.

CHEMICALS.

Nitrate of soda.—Before the war virtually all of our nitrate imports were devoted to the production of fertilizers, and our needs in 1913 equaled more than 625,000 tons. With the outbreak of the European War and the placing of munition orders with American manufacturers, our requirements for nitrates increased considerably, and by 1916 our imports of nitrate of soda had grown to 1,218,423 pounds, an increase of almost 100 per cent. The Chilean market, of

course, felt the effects of the stimulated demand following the declaration of hostilities, and the price of nitrate of soda rose considerably.¹ It was not until after the United States entered the war, however, when the War Department had begun actively to compete in the Chilean market against both American private buyers and the representatives of the allied Governments, that prices really soared. In September, 1917, accordingly, nitrate prices were more than twice the average for 1913-14.

The importance of nitrates to the war program, however, made essential the elimination of any haphazard competitive system of purchasing. Accordingly, in October, 1917, the Allied Governments began negotiating with the Chilean producers in the hope of securing an adequate supply of nitrates at a price more reasonable than was then being paid. These negotiations were consummated on December 10, 1917, and resulted in the Allied Governments securing a virtual monopoly over the output of Chilean nitrates. A nitrate executive was appointed by the Allies with headquarters in London, and all purchases of nitrate of soda in Chile for the various belligerents were concentrated in his hands. It was only through this nitrate executive that the various Governments could secure supplies by allocations made only on the basis of minimum requirements.²

Prior to the American entry into the war virtually all of the nitrate of soda brought into the United States was imported by four firms who controlled to a large degree the American sales of this commodity. The machinery for nitrate distribution, then, was highly concentrated, and it was but logical that so far as possible it should be kept intact. Accordingly, it was arranged by the War Industries Board that these importing firms purchase the total amount of nitrate of soda allocated to the United States by the nitrate executive, and continue its distribution as in normal times. It was necessary from the beginning, however, to distinguish between the two types of American demand. First, there were the military needs which the importers agreed to supply at actual cost³ plus a nominal expense fee. And, second, there were the requirements of the fertilizer manufacturers and of other civilian nitrate users.

¹ Nitrate of soda sold for \$3.60 per hundredweight in February, 1916, an increase of 56 per cent over its prewar average.

² The estimated minimum requirements for the United States for the year 1918 were as follows:

	<i>Tons.</i>
For munitions.....	1, 100, 000
For chemicals.....	215, 000
For commercial explosives.....	185, 000
For fertilizers and the Department of Agriculture.....	300, 000
Total.....	1, 800, 000

³ The cost of the nitrate delivered was to be an average price based upon the receipts for each month.

To these consumers the importers were to distribute only such amounts of nitrate as were allocated by the War Industries Board,¹ and for their services they were paid a commission of 2½ per cent over the cost of their product landed in the United States. The War Industries Board, on the other hand, stipulated that they would allow no concerns other than the four which entered into this agreement to import any nitrates into this country. In order that an equal price might result for all buyers the Shipping Board established a uniform shipping rate from Chile to the United States. Furthermore, the War Industries Board made arrangements for the shipping of the necessary coal, fuel, oil, etc., required for the manufacture of nitrate of soda, and in this way a steady output was assured, while at the same time any manipulation of prices by Chilean speculators under the claim of ostensible high costs was eliminated.

The first deliveries under this pool arrangement were made in January, 1918. It soon became apparent that the control over the whole nitrate situation in the United States would require some supervising body, for the supervision of distribution, the fixing of pool prices and the clearance of all contracts covering the imports and sales of the approved importers were matters too vital to the war program to be left unregulated. For this purpose the nitrate commission of the United States, a body made up of representatives of the four approved nitrate importers and a representative of the War Industries Board, was created. Their main function, however, soon developed into the control of nitrate prices. The nitrate executive at London determined each month an average pool price and on the basis of this figure the average monthly price in Chile for the United States purchasers, was computed. Considerable difference, of course, still existed between this Chilean price and the price of nitrates delivered in the United States; for there were many charges such as hauling, freight, insurance, exchange, and the like, which had to be added. And it was the determination of this final landed price that formed the greater part of the task set before the nitrate commission.²

From the point of view of its primary purpose the plan of nitrate control was successful as is evidenced by the fact that during the

¹ The amount of nitrates to be purchased for distribution to civilian consumers was limited however, to an amount equal to their total imports for the calendar year 1913. From this amount were deducted such stocks as had been purchased in 1917 and which had not been shipped from Chile prior to the beginning of 1918.

² This landed pool price varied from \$4.10 per 100 pounds in May to \$4.55 in December. For the first four months of 1918 no definite pool price was determined and tentative figures of \$4.25 and \$4.35 per 100 pounds were used for billing purposes. It should be stated that these prices were not exact and were based on the figures available from bills and vouchers. Tentative monthly prices were usually made and when all necessary figures became available, the nitrate commission arranged for actual prices and saw to it that the importers made adjustments with their customers on the basis of these final prices.

entire period of the war all needed nitrate was secured.¹ That the price was strictly controlled at the lowest possible minimum seems also beyond doubt.

Heavy acids.—Sulphuric acid: Arrangements were made by the Army and Navy with the manufacturers of heavy acids late in 1917 relative to the prices to be paid by the United States Government for acid supplies.² There was no instance of price fixing, strictly speaking, in the acid industry until the summer of 1918. The agreed prices of late 1917, which applied to the governmental purchases of H_2SO_4 , were contract prices only and may be considered in a measure similar to any other long-time commercial contract.

It appears, however, that there was some doubt in the minds of the Government authorities as to the advantages derived from the agreed sulphuric acid price, and in early 1918 they instructed the Federal Trade Commission to look into the cost of producing acid in this country. The result of this investigation showed a great divergence in costs between the several types of producing plants, and it was apparent that no price could be fixed which would limit the returns to all producers within the same bounds. There were, for example, the high-cost chamber-process producers, upon whom the Government was dependent for 1,000,000 tons of sulphuric acid in 1918. Secondly, there were those manufacturers who obtained their sulphur as a by-product from the smelting of zinc and copper ores. And finally there were the low-priced producers who used the modern contact process to produce their sulphuric acid. The large variation in the costs of these three types of producers, upon all of whom the Government was dependent for its supplies, made it evident that a price which would give the chamber-process manufacturers a moderate profit would result in an abnormally high return to the contact producers. The solution first considered was a series of individual prices to be applied to the products of plants in accordance with the process used in the manufacture of sulphuric acid, but this finally was deemed impracticable. The possibility of commandeering was considered and dismissed because of difficulties involved, and the fact that the military needs were hardly large enough to war-

¹ Mr. B. M. Baruch, chairman of the War Industries Board, in a statement published in the Federal Trade Information Service of Dec. 24, 1918, says that there was no halting at any time during the war in the manufacture of war materials which depended upon nitrates.

² As a result of the negotiations entered into between the military authorities and the manufacturers of sulphuric acid, the price of sulphuric acid to the Government was fixed for the first and second quarters of 1918 as follows:

	Per ton.
60° B.....	\$18
66° B.....	30
20° oleum.....	35

These prices did not apply to purchases made by subcontractors for explosive contracts for the United States or its Allies.

rant such action. Moreover, it was quite evident that the total needs of the country necessitated the stimulation of the productive capacity of the country in every possible way, and this meant the establishment of "fair and full prices," provision for heavy plant depreciation and the obtaining of the fullest possible output from the highest cost producers.¹

Accordingly, a system of price fixing was decided upon which allowed a uniform price to all consumers, governmental and civilian alike. It was believed that the excess-profits tax would lead to a leveling in the returns of various producers.

On June 26, 1918, the acid producers met with the price-fixing committee to help determine upon a fixed price for their products. The negotiations resulted in the fixing of the price of 60° B. sulphuric acid at the same figure which the Army and Navy were paying for their supply, namely, \$18 per ton.² This price was considerably lower than the current market price and meant a reduction of \$7 per ton to the civilian consumer. With this price as a basis, the price for 66° B. was fixed at \$28 per ton, a decrease of \$2 from the former Government contract price.³ Similarly, the price of 20 per cent oleum, a highly concentrated form of sulphuric acid, was fixed at \$32 per ton, which was \$3 less than the agreed price of late 1917. These prices were to remain in effect for 90 days, with the United States Government having first call upon the entire output of the country or any part thereof which it required.

Even these prices, however, do not appear to have been as low as the cost of producing sulphuric acid seems to have warranted, and by the end of the summer of 1918 the chemical section of the War Industries Board asked for the further lowering of the agreed prices. These prices were to expire at the end of September, and on the 26th of that month the producers of sulphuric acid appeared before the price-fixing committee to ask for a continuation of the June 26th price. The price-fixing committee, on the recommendation of the chemical section, refused this request and recommended instead a series of prices which ranged from \$2 to \$4 lower than

¹ The problems which faced the chemical section of the War Industries Board when they attempted to determine upon the method of acid price fixing to be adopted, are fully described in the final reports of the acids and heavy chemicals section of the War Industries Board, 1919.

² This price was supposed to yield a fair profit to the high-cost producers; i. e., manufacturers who used the chamber process.

³ This price was \$7 a ton lower than the figure currently quoted on the market, and when compared to the spot quotations of two months previous meant a decrease of \$17 per ton. The price for 66° B. acid was determined by adding to the price of the 60° acid a differential which covered both the large percentage of acidity in the higher strength acid and the cost of concentration.

those then prevailing. There was no longer the fear of losing the output of the high-cost producers. It was the opinion of those in charge of the military requirements that the extra supply secured for munitions by the curtailment of many nonessential industries and the output of the numerous new Government plants would be more than sufficient to offset any such loss. Moreover, the figures of the Federal Trade Commission showed that the cost of producing 66° B. Sulphuric acid during the first six months of 1918 had varied from \$15 to \$16 per ton,¹ while the price fixed was \$28 per ton. Indeed, the chemical section had recommended that in default of a lower price on sulphuric acid, "serious consideration should be given to the advisability of commandeering the output of the contact acid plants" before the end of the year.²

The suggested price of the price-fixing committee was finally accepted by the acid industry, and \$16 was agreed upon as the price of a ton of 60° B. sulphuric acid for the last quarter of 1918.³

Nitric acid: Shortly after the determination of a Government price for sulphuric acid in the latter part of 1917, an agreement was reached with the producers of nitric acid, whereby they obligated themselves to supply the military and naval needs for 42° B. nitric acid at 7½ cents per pound. Toward the middle of 1918, however, the Ordnance Department began to experience difficulty in placing new orders at the agreed price. An investigation was therefore made into the costs of the concerns which were furnishing nitric acid supplies, and it was found that the approximate cost of manufacturing a pound of

¹The increasing costs of materials, labor, fuel, and transportation increased this cost considerably during the latter half of 1918. The prices recommended by the price-fixing committee, however, made a liberal allowance for this increase, for it was their desire to fix a price which would permit the acid manufacturers to use domestic pyrites, which meant a higher production cost than would have been the case had brimstone been used. Both raw materials were selling at almost equal prices, but most of the American plants were equipped for the use of brimstone rather than pyrites. The shipping shortage had virtually cut off the supply of Spanish pyrites, which had previously been the common raw material used in producing sulphuric acid, and various plants turned to the use of domestic brimstone. This led to a sudden growth in the consumption of the latter, and soon the demand threatened to exceed the possible production. Indeed, the reserve stocks were drawn upon and a serious depletion was threatened.

²Note memorandum from Mr. A. K. Brunner, chief of the acids and heavy chemicals section of the War Industries Board, to Mr. L. L. Summers, chief of the chemicals division.

³A price of \$25 per ton was fixed for 66° acid and \$28 for 20 per cent oleum. In this connection it is interesting to note that had the war continued a vast economy in the factory cost of producing acids would have been obtained by the Government through the use of its new plants, which could have turned out 100 per cent H_2SO_4 at \$15 per ton, while the fixed price for 20 per cent oleum (104½ per cent H_2SO_4) was \$28 f. o. b. makers' works, or about \$30 per ton laid down at consumers' works. The saving, therefore, would have been approximately 50 per cent. This figure, however, does not take into consideration the cost of the Government plant, and thereby eliminates a large overhead charge. (Cf. memorandum by Mr. John M. Goetchius in the files of the War Industries Board.)

nitric acid was 7.14 cents.¹ This meant, then, that the average profit realized on the agreed 7½ cents price was but 0.36 cent.

It was immediately apparent that the price of nitric acid to the Government would have to be raised, and on July 26 the question was brought before the price fixing committee. It was necessary first to fix the price of sulphuric acid, however, since the price of nitric acid is in large part dependent upon the latter. On the basis of the sulphuric acid price of \$28 per ton² for 66° B., the price of 42° nitric acid was fixed at 8 cents per pound for all consumers, civilian and Governmental, effective July 1, 1918, for the third quarter of the year. This price was continued by agreement through the last quarter of 1918, and expired by limitation on December 31.

Conclusion.—With the cessation of hostilities came the end of the Governmental need for acids. The immediate fear of the trade was the potential competition of the newly completed Government plants. Moreover, there was the danger of a sudden fall in acid prices in consequence of the cancellation of contracts and the desire to get rid of surplus stocks. Accordingly, the War Industries Board was asked to continue its supervision of the acid industry and to relieve the trade of “a share of its burden in adjusting inventories and heavy warring stocks.” The trade also asked for the continuation of price fixing, at least through the first quarter of 1919. The price-fixing committee did not feel that conditions warranted any such action, and on December 3, 1918, they voted to discontinue the agreed prices of heavy acids after December 30, 1918.

Sulphur and pyrites.—Prior to 1917 approximately 60 per cent of the sulphuric acid consumed in the United States was made from Spanish ores. The shipping shortage of 1918, however, made necessary the curtailment of our pyrites receipts, and in March the War Trade Board issued an order restricting Spanish pyrites importations to 125,000 tons for the six months following April 15. This amount, which was less than enough to fill our requirements, was distributed by the committee on foreign pyrites of the Chemical Alliance (Inc.), to the five importers who formerly controlled the

¹ The cost of producing 95 pounds of nitric acid, as given in the report of the chemical section of the War Industries Board, was as follows:

Raw materials:

Nitrate of soda.....	\$4. 25
Sulphuric acid.....	1. 35

Total cost of raw materials.....	5. 60
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Fair average manufacturing cost, including overhead.....	1. 18
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Total cost of 95 pounds.....	6. 78
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Cost of 1 pound of nitric acid.....	. 0714
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² On the basis of 100 pounds of H₂SO₄ being required to produce 95 pounds of HNO₃, it appears from the above cost figures that \$27 rather than \$28 (the fixed price June 26) was used as the cost of a ton of H₂SO₄.

greater part of our foreign receipts, in proportion to the tonnage imported by each in 1917.

The cutting off of our sulphur supplies had a considerable effect upon the American brimstone industry, and the demand for the domestic product grew by leaps and bounds. The large demand for sulphur supplies and the essential part which sulphuric acid played in the war program, led to a more or less strict control over the brimstone industry during the spring and early summer by the War Industries Board.

There are in the United States two companies which produce 99 per cent of all the sulphur entering into domestic consumption, and the output of both was put under allocation by the War Industries Board. It appears, however, that one of these companies did not cooperate as actively and as wholeheartedly as was desired by the chemical section of the War Industries Board. The chemical authorities in Washington offered a resolution, therefore, which was passed by the War Industries Board and approved by the President on July 2, 1918, authorizing the virtual commandeering of the sulphur-producing industry. The chief of the sulphur and pyrites section was appointed to represent the War Industries Board in controlling the production and distribution of sulphur materials, and he, together with a committee of the Chemical Alliance, administered the industry during the remainder of the war period.

In the fall of 1917 the fertilizer committee of the Chemical Alliance had arranged for a price of \$22 per long ton f. o. b. mines, for governmental purchases of sulphur, and this policy continued through the first half of 1918. The same price was maintained after the War Industries Board took control of the sulphur industry in July. Although there was at no time adopted any complete system of sulphur price agreements which applied to all purchasers, the control of supplies and the allocation thereof by the War Industries Board to essential consumers only, had the effect of a fixed price.

Wood chemicals.—It can hardly be said that wood chemicals were subject to price fixing in the accepted sense of the term, for the price agreements which were made relative to the products of wood distillation applied in most instances only to sales to the United States Government and to the Allies. Yet the fact that prices were fixed to the military consumers had an important effect upon market prices in general, and for that reason the situation in the industry is worthy of consideration.

A number of chemicals which are both the direct and indirect products of wood distillation were vitally connected with our military

program of 1917-18,¹ and it was thought necessary from the very beginning to avoid any possible dissipation of the stocks in the hands of distillers. Wood chemicals were therefore placed under requisition by an order of the Secretary of War on December 24, 1917, and from that date until December 14, 1918, the distribution of the entire American production of acetate of lime, acetone, ketone, and wood alcohol—the output of some 100 concerns—was administered by the wood chemical section of the War Industries Board.²

It was necessary, however, to make some agreement upon prices to be paid these distillers, and before the year 1917 came to a close the prices of all the important direct products of wood distillation to the United States Government and to the Allies were fixed.³ The prices thus fixed were in most instances lower than the current market quotations, and since the supplies taken under control were allocated mainly to producers of more highly fabricated chemicals, the authorities in charge saw to it that the benefits secured from this lower price were likewise figured for the finished products, which, after all, were the most needed for the military program.

Acetic acid: Large quantities of acetic acid were required by the Army authorities. The price of acetic acid current in early 1918 was based on a 6-cent cost for acetate of lime, which in December, 1917, had been lowered by the Government authorities to 4 cents per

¹ This was especially true of certain of the wood distillates upon which the Signal Corps was dependent for the manufacture of cellulose, acetate, etc.

² The original commandeering order extended only to July 1, 1918. It was later extended for six months following July, the National Wood Chemical Association having agreed that the terms and conditions covering the original commandeering order would be a satisfactory basis for the second half of the year.

³ The prices for the various products were fixed f. o. b. shipping point as follows:

Acetate of lime (cents per pound).....	4
Crude wood alcohol (cents per gallon).....	50
95 per cent wood alcohol (cents per gallon).....	79
97 per cent wood alcohol (cents per gallon).....	82
Pure methyl alcohol (cents per gallon).....	86
Methyl acetone (cents per gallon).....	86
Denaturing grade alcohol (cents per gallon).....	79
Ethyl methyl ketone (cents per pound).....	25½

These prices continued in effect as long as the industry was under the control of the Government authorities. Due to demands for higher wages and due to the increases in freight rates, in the summer of 1918, the National Wood Chemical Association asked for a higher price for acetate of lime and crude alcohol. This request was presented to the price-fixing committee to be acted upon, but that body in turn passed it on to the Federal Trade Commission so that an investigation of costs might be made. No report on the situation had been received up to the time of removing of control in December, and hence no action was ever taken by the price-fixing committee relative to increasing the price.

The price fixed for refined wood alcohol did not, as was the case with the other wood chemicals taken over, go into effect immediately after requisitioning the industry; for there were on hand Dec. 31, 1917, large stocks of alcohol which had been refined from crude bought at the November and December market price of 90 cents per gallon. It was deemed advisable out of justice to the trade, that such supplies be disposed of on the basis of 90 cent crude alcohol, and that the new price mentioned above go into effect when the old stocks had been absorbed.

pound. Accordingly, on February 13, 1918, the chemical section of the War Industries Board arranged to have the price of acetic acid lowered so as to be equitable with the 4-cent basis for acetate of lime; and after investigating the costs of producing acid, fixed the price of 100 per cent commercial acetic acid at 15½ cents per pound. Although this price was almost 10 cents lower than the current quotations, it allowed for a fair margin of profit since it had been found that the average cost of production varied from 11.44 cents to 14.50 cents. There were on hand on February 1, however, large stocks of acetic acid produced from acetate of lime which had been purchased on the old price basis, and justice to the producers demanded that some provision be made for their disposal. An exception was therefore made in the case of these supplies, and producers were allowed to dispose of them on a basis of 6-cent acetate of lime.

Likewise, provision was made for the price of glacial acetic acid on the basis of the new price of acetate of lime and 19 cents was fixed as the figure at which this commodity was to be delivered, naked at plant, on Government purchases. Here, also, the fixed price was considerably lower than the current market price of from 31 to 40 cents. Indeed, glacial acid had always held a fictitious price in the trade, since the entire production was virtually under the control of three manufacturers. The 19 cent price represented a profit of 15 per cent under an economical process of manufacture,¹ and yet it appears that the manufacturers were dissatisfied with it. They felt that they were entitled to 25 cents a pound for their product. The chemical section of the War Industries Board refused this request and the producers were asked to accept the 19 cent price or submit detailed cost of production figures to substantiate the validity of their claim. The glacial acetic acid producers then accepted 19 cents for their product as manufactured from materials on which the Government price had been fixed.

Methyl acetate: The early part of 1918 witnessed a shortage of this chemical and it appeared that there would be difficulty in securing Army requirements. Moreover, there was at first little hope of increasing the supply, since the entire production was in the hands of a single concern. Finally, however, other firms were interested in the situation and agreed to undertake production at 21 cents per pound. This figure was based on the fixed price of methyl alcohol and acetate of lime and was adopted as the price for all Government orders.

Formaldehyde: The production of formaldehyde in early 1918 was in the control of five concerns. A detailed investigation of their costs of production showed that they were manufacturing formalde-

¹ Compare memorandum from L. L. Summers to the War Industries Board, Feb. 16, 1918.

hyde at a cost of $12\frac{1}{2}$ to $13\frac{1}{2}$ cents.¹ The market price at times was around 22 cents per pound, while prices as high as 30 and 35 cents had been quoted. It was apparent that the situation warranted a revision of prices, and on February 12, at a meeting with the formaldehyde manufacturers, a price of $15\frac{1}{2}$ cents per pound was fixed for formaldehyde f. o. b. shipping point, naked. This price, however, was based on 86 cents pure methyl alcohol, which was the figure fixed for Government-controlled supplies. There were in the hands of the manufacturers large stocks which had been produced from alcohol that had cost \$1.25, the old market price. An opportunity to dispose of these stocks at the old prices was therefore given to the producers of formaldehyde, and not until June 12, 1917, did the agreed price of $15\frac{1}{2}$ cents really become effective.²

• *Toluol*.—In prewar times toluol played relatively a small part in the chemical consumption of the United States. Indeed, it was merely a by-product of coal-tar distillation, the production of which was little developed. The American consumption prior to 1914 was approximately 500,000 gallons annually. Toluol prices varied from 19 to 30 cents. The outbreak of the European war, however, with the consequent demand for explosives revolutionized the production of toluol, and overnight, as it were, this chemical assumed a position of utmost importance. The war had not yet entered its tenth month when the price of toluol jumped from 25 cents to \$2.50 per gallon, and on the first anniversary of the declaration of hostilities, market quotations were in the vicinity of \$3.50. At the end of 1915 the peak of this runaway market was reached when toluol was quoted at \$4.50. This price continued through May, 1916. It was inevitable that such prices should lead to the development of facilities for the greater production of toluol, and by the middle of 1916 many new plants were reaching completion. The new potential supply led to a "softening" of the market and June witnessed a fall in prices, while the addition of still further productive facilities finally brought toluol prices down to \$1.50 per gallon in November.

It was at this point that the United States Ordnance Department entered the market after our declaration of war in 1917, and the price of \$1.50 was agreed upon with the producers for our military supplies. However, it became evident that this price would not itself lead to the acquiring of a supply sufficiently large to meet all the necessary demands. Accordingly, the Ordnance Department set out to stimulate production, and, by placing large contracts, advancing

¹ These costs were based on the Government fixed price of raw materials.

² This $15\frac{1}{2}$ -cent price for formaldehyde was one of the few instances where the price of a requisitioned commodity was distinctly fixed for the United States Government, the Allies and the consuming public alike. Usually such fixed prices were made applicable to the United States Government and the Allies only.

funds for the construction of private and Government plants, it increased our productive facilities so that our output for 1918 reached 13,553,860 gallons. This amount represented an increase of almost 3,000 per cent over the prewar average.

A large part of this growth in production was achieved, however, only after the toluol industry had been commandeered in February, 1918, when there began a distribution of all toluol produced in the United States by a committee of representatives of the Army, Navy, and War Industries Board. The price paid for the toluol so commandeered was the agreed figure of \$1.50 per gallon. On July 18, 1918, the price-fixing committee approved this price as applicable to all sales of toluol, civilian as well as military, and no shipments were allowed from any plant at a price in excess of \$1.50 per gallon in tank cars and \$1.55 per gallon in drums.

In November, 1918, the control over the toluol industry was relinquished. Immediately the market crashed, and December, 1918, witnessed sales of toluol at 25 cents a gallon, a price $83\frac{1}{3}$ per cent lower than the quotations for the preceding month.

Alkalies.—The prices of alkalies were in all cases fixed for Government purchases only and, with the possible exception of liquid chlorine, the nonmilitary use of which was virtually eliminated from June to November, 1918,¹ the prices so fixed were considerably lower than those on the open market. Virtually all agreements as to the price of the alkalies were made in early 1918 and continued through the year until November 25. Several agreed prices, however, such as those of carbon tetrachloride and caustic soda, remained effective until the end of the year.

¹ A brief summary of the prices fixed on the various alkalies, such as bleaching powder, carbon tetrachloride, caustic soda, liquid chlorine, and soda ash will be found on p. 805.

6. THE WAR TRADE BOARD.

The War Trade Board, charged with the responsibility for determining what commodities should be exported or imported, exercised less direct price control than any other war board.¹ It obviously had no concern with the great bulk of staples that were bought and sold for war uses within the country. The board, to be sure, had practically absolute power to permit or refuse licenses to export goods or import them, and sometimes used that weapon when requested to enforce price regulations upon exporters and importers. But the business of controlling the amounts of exports and imports was in itself a big one, and the War Trade Board usually left to other boards the setting of prices. That procedure seemed to it wise, in part because the War Industries Board, the Food Administration, and the Fuel Administration were all regulating prices, but more especially because the tonnage and the enemy-trade problem, rather than price factors, were the primary basis for determining what goods to export or import.

(1) THE CREATION OF THE WAR TRADE BOARD.

The passing in turn of the espionage act and the trading-with-the-enemy act gave the President wide powers over exports, imports, and enemy trade. The President, in full appreciation of the serious need for a control over all foreign trade, created the War Trade Board through an Executive order of October 12, 1917, and charged it with a responsibility for administering the controls authorized by these two laws. The new War Trade Board, by that order, superseded the earlier Exports Administrative Board and the former Exports Council became the War Trade Council.² There was thus set up the final machinery for a control over all war trade. It is worthy of note at this point that the presidential proclamation of

¹ A fuller account of the activities of the War Trade Board should be had from its own forthcoming official history.

² The War Trade Board, made up of representatives from various important Government bureaus, had the following membership at the signing of the armistice: Vance McCormick, chairman, and representative of the Secretary of State; Thomas L. Chadbourne, Jr., counselor, and representative of the Secretary of State; Albert Strauss, representative of the Secretary of the Treasury; Alonzo E. Taylor, representative of the Secretary of Agriculture; Clarence M. Woolley, representative of the Secretary of Commerce; Beaver White, representative of the Food Administration; and Edwin F. Gay, representative of the United States Shipping Board.

November 28, 1917, vitally enlarged the scope of War Trade Board duties by increasing the list of commodities requiring license for export, and by the initial making of a similar list for imports.

The turning of this country from a neutral into an ally involved the laying down of very definite policies with respect to our foreign trade. It meant especially the conserving of our own supplies for our war machinery and that of our Allies, the cutting off of all direct or indirect trade with the enemy, and the conservation of tonnage for war-making uses. The working out of these general policies by the War Trade Board gave rise to four primary functions, around which virtually the whole work of the board turned: The commercial isolation of the enemy, the financial isolation of the enemy, the obtaining of essential supplies and controlling prices, and the conservation of ocean tonnage.¹

(2) ALL EXPORTS AND IMPORTS BROUGHT UNDER LICENSE CONTROL.

The actions of the War Trade Board concern price control only so far as they pertain to the exercise of regulation over prices, direct enough to lay hands upon. The extension of control over exports and imports ushered in important influences upon prices. The control of exports, begun relatively early, and later that of imports were extended item by item until the two famous proclamations of February 14, 1918, brought under license control all exports and imports.²

THE CONTROL OVER EXPORTS.

It is conceivable that the restraint upon the exportation of certain commodities that was imposed by the requirement of licenses for exports sometimes had a more vital indirect effect upon the price level than the corresponding restraint of imports. The effect presumably would be most felt in the prices of those goods which were not only brought under license control, but were actually denied exportation and thrown as a consequence into the home market. In a general way the actual holding of commodities from foreign sale, in so far as it increases the supply at home, would tend to lower or

¹This division of functions was selected by Henry F. Walradt and B. D. Mudgett as the basis for their history of the War Trade Board.

²The War Trade Board issued at the same time a statement in which it said in part:

"The promulgation of these two proclamations did not mean an embargo on exports or a prohibition of imports, but placed in the hands of the President the power to regulate, which he will exercise through the War Trade Board and the Treasury Department. This power will be exercised with the single purpose of winning the war, and every effort will be made to avoid unnecessary interference with our foreign trade and to impose upon our exporters and importers no restrictions except those involved in the accomplishment of definite and necessary objects."

stabilize market prices. But there is no measure of the effect of these export rulings that is accurate or even approximate.¹

THE CONSERVATION LIST.

The commodities for which the War Trade Board required licenses prior to their exportation were said to have been put upon the conservation list. This conservation list, which began with a very few important raw materials on July 9, 1917, was extended from time to time until the whole lot of exports were entered upon it by February 14, 1918,² and by the signing of the armistice it contained nine hundred odd commodities.³ These commodities, which contained representatives virtually from our whole range of production, were all actually restricted from export trade under license control.

THE CONTROL OVER IMPORTS.

The control over imports, whether of more or less influence upon the price level, afforded more opportunity for price regulation. The War Trade Board, which was not a price-regulating body and which interfered with prices only when pressed to it by other bodies, was seldom under necessity for stipulating prices for exports, since the regulation of domestic commodities was exercised by the War Industries Board, the Food Administration, and the Fuel Administration. But frequently these very bodies found themselves under peculiar administrative difficulties in the price control of foreign goods imported into the country, and appealed to the War Trade Board to stipulate stabilization as a condition of their entrance into American markets.

THE RESTRICTED LIST.

This inquiry does not go into the ramifications of import control, except as prompted by odd instances where the War Trade Board stipulated price regulation as a condition for the granting of an import license. The board, in order to interfere as little as possible with business as constituted, administered these import controls largely through trade organizations. The latter, in cooperation with the War Trade Board, acted as consignees of various import commodities to keep themselves informed for the benefit of the board

¹ The following instance of an exercise of price control, in connection with the export license power, is perhaps more interesting than widely significant.

On and after July 20, 1918, no license will be issued authorizing the exportation of gold jewelry, gold watches, gold plate, or other manufactures of gold unless evidence satisfactory to the War Trade Board is submitted showing that the f. o. b. selling price of the articles to be exported is not less than three times the value of the fine gold contained in such articles.

² The proclamation of Feb. 14, 1918, became effective Feb. 16.

³ Consult the Export Conservation List issued by the War Trade Board, effective Oct. 15, 1918, and that effective Dec. 6, 1918.

as to the use and disposition of the import commodities, and the observance by the importers of any guaranty or agreement given in connection therewith; to prevent hoarding and speculation, and to keep full and complete records of the commodities and their distribution¹. The extension of import control was made by the placing gradually of certain commodities upon the so-called restricted list. That list, the initial issue of which appeared November 28, 1917, was made to include all imports by February 14, 1918, and thus contained more than 140 classes of commodities by the signing of the armistice.

(3) THE EXERCISE OF PRICE CONTROL BY USES OF THE LICENSING POWER.

There lay in the very restriction of exports and imports, even where a direct price control was not exercised specifically, a potent though not measurable influence upon prices. The War Trade Board exercised infinitely more export and import restrictions than the few in which it avowed a direct interest in the price factor. But in the main an enormous restriction upon export trade in particular goods for any reason would tend to stabilize domestic prices, and a corresponding restriction upon imports would tend to disturb the prices of available stocks. The great body of export-conservation rulings, it would be supposed, worked for lower, and that of import-restriction rulings for higher prices. But this very considerable indirect influence which the War Trade Board rulings must have had upon prices, important though it be, leads too far into speculation for its adequate analysis in a record of fact.

Quite apart from any indirect effects upon prices which may have resulted from export or import restrictions as such, there were several steps taken by the War Trade Board to control prices. Those instances came in the form of conditions which the board set up as prerequisite to the issuing of licenses for the importation of a few of the commodities appearing on the restricted list. Even those exceptional cases, however, were seldom highly developed controls such as were issued and administered by the price-fixing boards. They were, for the most part, blanket provisions simply looking to the stabilization of the prices for imported goods in the domestic markets. The War Trade Board, at requests from other war boards, undertook to provide in part for the stabilization of certain prices (asbestos, pig tin, chloride of tin, tin ore, wool, pickled skins, varnish gums, sugar, castor oil, castor beans, hides and skins, leather, tanned skins, silk noils, silk-noil yarns, garnetted stock and silk waste,

¹ Rules and regulations, War Trade Board, No. 2, May, 1918, p. 64.

manila fiber, crude rubber, coffee, New Zealand fiber, copra, tin, burlap, burlap bags, and jute), either by requiring the importer to give a guaranty, an option, both a guaranty and an option, permitting importation of substitutes, restriction of certain imports that would compete with domestic stocks, or by imposing an embargo.¹

One method by which the War Trade Board took precaution that goods coming in under authority of its licenses should not be hoarded for speculation, was to require a guaranty from the importer that he sell his goods not above the maximum set by any war board. Applicants for sugar or wheat-flour licenses were required to guarantee not to sell their sugar or flour to any party at any price without first securing the approval of the Food Administration. The board, by a resolution of August 22, 1918, declared that no licenses to import pickled skins would be issued unless the applicant agreed not to sell the skins at a price in excess of the prices established by the price-fixing committee. Importers of asbestos, pig tin, chloride of tin, and tin ore were required to guarantee that they would use these imports "for our own manufacturing use and not for hoarding or speculative purposes." A ruling passed late in September, 1918, limiting the amount of varnish gum to be imported, stipulated that the amounts allowed to enter should be allocated and the price controlled by the War Industries Board. Still another and earlier ruling, May 27, restricted the amount of asphalt allowed to enter and required the importers to guarantee to sell at a price to be determined by the War Industries Board.

The most common requirement which the War Trade Board imposed as a condition for the granting of an import license, designed purely to regulate prices, was the agreement of the importer to give the Government an option upon the imported goods. The sugar guaranty, indeed, early in December, 1917, had contained an option clause by which the importer promised to sell his sugar, if so requested, to the international sugar committee at such price as it might prescribe. The well-known early wool option was made on December 15, 1917, and required all importers of foreign wool to give the Government, as a condition of their license, an option to purchase all or any of the wool covered by his import license, at a price equivalent to 5 per cent less than the market price prevailing July 30, 1917.² This option was to hold 10 days after the entry of the wool at the customhouse, but the Government was given the right to purchase at that price so long as any part of the shipment remained

¹ Mr. Henry F. Walradt, after studying carefully the minutes and other records of the War Trade Board, worked out the above classification of controls over prices.

² A full statement of the regulations governing this important wool option may be found in the War Trade Board Journal of Jan. 8, 1918, p. 6.

unsold. It became soon necessary, in order to expedite the administration of the wool option, to enforce it through the medium of the Textile Alliance. The importer then was required to indorse his bill of lading to this private organization, as a condition of the license.¹

Similar options, granting the Government the right to purchase the goods at a given price, were required as a condition of the licenses allowing the importation of castor oil, castor beans, hides and skins, leather, tanned skins, leather manufactures, platinum, iridium, palladium, quebracho extract, silk noils, garnetted stock, and silk waste.

The price control that was exercised over crude rubber combined the guaranty and option feature in a unique way. The Rubber Association of America, to whom the War Trade Board officially asked all importers to indorse their bills of lading, was required not to release any shipment of rubber until each applicant had signed an option allowing the Government to purchase the stock imported at a certain price, and also a guaranty that, should the Government not take advantage of the option, the importer would not sell the imported rubber at a price higher than that provided by the option.²

The diverse ways by which the War Trade Board exercised its licensing power to control prices was strikingly illustrated by its resolution of May 23, 1918, that no licenses should be granted for the importation of coffee which was carried at a freight rate greater than that established by the United States Shipping Board.³

There is on record one case where the War Trade Board assisted a Government board to hold down the prices of domestic goods by

¹ Mr. Henry F. Walradt, in summary of the results of this wool option for the official history record of the War Trade Board says:

"This policy of obtaining options on wool imports saved the United States over \$33,000,000. The fact that the wool importers were required to give this option made it unprofitable for them to buy foreign wool at the prices which were prevailing at the close of the year 1917; consequently the foreign growers were forced to lower their prices. From Dec. 15, 1917, when the option agreement was put into force, until Mar. 1, 1918, the average price of imported wool of the grades the United States Government was buying, fell from about 66 cents to somewhat less than 58 cents a pound, a drop of about 8½ cents per pound. Purchases made after Dec. 15, 1917, did not begin to arrive in this country in quantity until February, 1918. From Feb. 1, 1918, until Dec. 31, 1918, there were 405,624,700 pounds of wool imported into the United States. If it is assumed that 8½ cents was saved on each pound, the total amount saved by this policy was \$33,464,038."

² One of the most interesting instances of price control throughout the war is that set forth by the War Trade Board pertaining to crude rubber, in a letter to the Rubber Association of America on Apr. 30, 1918. That letter was published in full in the War Trade Board Journal for June, 1918, p. 17.

³ The purpose of this ruling was to aid in enforcement of the rates which had been established on Nov. 21, 1917, by the chartering committee of the Shipping Board. It appeared that these rates were being disregarded. In fact at the time this ruling was passed the coffee en route to the United States was being transported at rates which caused the total freight charges to be hundreds of thousands of dollars in excess of the lawful amount. The profiteering in freight rates on coffee had caused an unstable condition in the coffee market, and a wide variation in the cost of coffee to different buyers. Accordingly, all licenses for the importation of coffee were held up until the importers presented a sworn statement that the rate of freight paid for the transportation of the coffee was not in excess of the rate established by the Shipping Board. (Report of the War Trade Board.)

allowing the unrestricted entrance of a substitute. The Food Administration attempted during the war to prevent rises in the price of cottonseed oil on domestic markets. Copra, which is used to manufacture coconut oil, has a vital relation to the prices of cottonseed oil. The War Trade Board, in order to assist in the stabilization of cottonseed oil prices, lifted its restrictions upon the importation of copra on July 12, 1918.

There has been, since the signing of the armistice and contrary to the prevailing policies previous, occasion to sustain the prices of certain materials which were stimulated in production during the war. The War Trade Board, in one conspicuous instance, attempted to sustain a domestic price by restricting the importation of competing goods. A considerable importation of pig tin took place during the war at high prices for the meeting of Government orders. That source of demand was cut suddenly short by the cessation of hostilities, and pig tin prices began to break. The War Trade Board, in order to protect from loss buyers who in good faith had bought large stocks for the Government, left standing its restriction upon the importation of pig tin.¹

One of the more serious of the problems confronting the Food Administration and the War Industries Board during the fall of 1918 was the rise in burlap and burlap bags. The Government had important uses for these materials as trench bags and packing cases. The high prices for bags frequently made necessary the shipment of potatoes and wheat in bulk and cargo for overseas in wooden cases. The British Government controlled its own purchase prices for bur-

¹ Mr. Walradt makes the following summary of the action of the War Trade Board with respect to pig tin after the signing of the armistice:

"In order to protect the buyers who had bought at high prices from the impending loss, the War Trade Board maintained the restriction upon the importation of pig tin which it had placed by a resolution passed on Oct. 4, 1918. This resolution revoked all outstanding licenses for the importation of pig tin, tin ore, and tin concentrates, and any chemical extracted therefrom to be shipped after Oct. 20, 1918. The resolution also provided that henceforth no licenses were to be issued for the importation of these commodities excepting for shipments consigned to the United States Steel Products Co. On Nov. 1 this resolution was modified to permit the importation of these commodities excepting pig tin, provided the bills of lading were indorsed to the American Iron and Steel Institute. Pig tin bought Sept. 30, however, could still be imported only by the United States Steel Products Co. The original resolution had been passed at the request of the inter-allied tin executive in London to effect an equitable distribution of pig tin. With the signing of the armistice the value of this resolution changed. The United States Steel Products Co. alone was able to import pig tin and this company already had more pig tin than it could sell without loss. The market price for tin outside of the United States had broken and if pig iron could have been imported freely, the stocks of pig tin already in the United States would have fallen greatly in value. As it was, the fact that tin ore was permitted to enter gave the smelters an opportunity to import the ore, smelt it, and put the pig tin on the market at a few cents below the price at which pig tin was being held by the United States Steel Products Co. This practice caused the War Trade Board, on Jan. 30, 1919, to pass a resolution whereby no import licenses were to be issued for any metal containing more than 20 per cent of tin. This measure is in harmony with the attempt which was being made to keep up the price of pig tin to prevent large losses to those importers who previous to the cessation of hostilities had purchased large stocks of pig tin for Government purposes."

lap at Calcutta, the primary market, but took no effective hand to prevent the Calcutta merchants from exacting enormous prices from American importers. The War Trade Board accordingly, on October 4, 1918, passed a resolution prohibiting the licensing of the importation of burlap, burlap bags, or jute without the approval of the Food Administration and the War Industries Board. This virtual embargo broke the speculation of Calcutta, it would seem, for the base price at that market dropped from 16.17 cents per pound on October 2 to 9.79 cents on December 28, 1918.

RUBBER.

The United States in the early years of the World War was dependent in large part upon the various warring countries or their colonies for many essential raw materials. One of the most important of these was rubber, a considerable portion of which came from the English and Dutch possessions in the Far East.

The British embargo of 1914.—When war first broke out in August, 1914, tires were the only important rubber products which were made contraband. In the following month the British Government added crude rubber to the list of contraband and decreed that rubber could be exported only to certain ports of Europe, namely, those of France, Belgium, Russia, Spain, and Portugal. In October the French Government followed suit and declared rubber absolute contraband. But Great Britain, late in October, issued an order forbidding shipments from those plantations in the Far East which were under her control to any port other than London, thereby making virtually all plantation rubber contraband. Even this latter decree, however, did not seem to bring the desired results, and finally during the last days of October, 1914, the British Government forbade all exports of crude rubber from any English port.¹

As a result of these restrictions, rubber prices soared, and it was said that the cost of the embargo to the industry was \$250,000 a day.² After several advances to the British Government the embargo was partially lifted, and in January, 1915, shipments of rubber to the United States were again permitted, but not without restriction. First, no rubber was shipped direct to any American consumer. It was consigned directly to the British consul general in New York, and he alone had authority to release it. Secondly, every American buyer before securing the release of any rubber was compelled to

¹ The reason for these actions on the part of Great Britain is given in the following extract taken from the *India Rubber World* for Nov. 1, 1914:

"It was given out that the requirements of the allied armies would be sufficient to absorb practically the whole plantation production for the next six months. It was stated that the British and French military authorities would need a new equipment of tires for the quarter million motor transport vehicles then being used in the war, and that there would be great demand for waterproof ground sheets for the troops, for rubber boots, to be used in digging trenches, for all kinds of surgical appliances,

² *India Rubber World*, January, 1915.

guarantee that he would not reexport except under specified restrictions and would not use it in trading with the enemy. This rule not only applied to the particular rubber which he wanted to have released, but to all the rubber, crude or manufactured, which he had on hand or might dispose of during the war.

This was the state of affairs as regards the rubber importer at the entrance of the United States into the conflict. Rubber had been coming into the country in tremendous quantities during 1916, and 1917 presaged the largest imports in our history.¹

The licensing of rubber imports.—On November 28, 1917, rubber was put on the restricted list by presidential proclamation and all imports were forbidden except under license. Thus the control of American imports was shifted from the British consul general at New York to the War Trade Board. The Rubber Association of America was virtually appointed the agent of the United States Government and undertook to collect information relative to the rubber industry for the War Trade Board; to act as consignee for rubber shipped to the United States; to release rubber to importers under instructions from the War Trade Board; to obtain from importers and manufacturers guarantees that they would not sell any rubber, directly or indirectly, to any country at war with the United States, or to any person, unless satisfied that there was no intention of exporting without an export license; to keep informed for the benefit of the War Trade Board as to the use and disposition of the imported rubber; and to keep full records of all importations of rubber. No restrictions were placed on the amount of rubber that could be imported, and throughout the first few months of the year large quantities of rubber came into the country.

But large imports of rubber meant large amounts of shipping space and long hauls, since the greater portion of our rubber supplies come from the Far East and Brazil.

The restriction of rubber imports and price fixing.—The military requirements of the country demanded a conservation of tonnage, however, and on May 7, 1918, after conference with representatives of the War Industries Board, the United States Shipping Board, and the rubber industry, the War Trade Board restricted the quantity of rubber to be licensed for import during the three-month period, May, June, and July, to 25,000 long tons. This was at the rate of 100,000 tons per year, or about two-thirds of the 1917 importation of 157,000 tons.² It was naturally expected that this cutting off of

¹ Indeed, our rubber imports for 1917 proved to be over 167,000 tons, as against 115,000 tons, in 1916 and 103,000 tons in 1915. See War Industries Board Bulletin, "Prices of Rubber and Rubber Products," by Isador Lubin.

² Subsequently, the War Trade Board virtually increased the amount to be licensed for import to 28,000 long tons (green basis) per quarter by ruling that the Brazilian imports should be allocated on a dry basis which allowed approximately 12 per cent for water content.

an appreciable part of our supply would start rubber prices upward, and, indeed, a speculative market did develop as soon as word was received that the restriction of the importation of rubber was contemplated.¹

As a preliminary step therefore to the restrictions of rubber imports, the War Trade Board inaugurated an option system whereby it regulated rubber prices from the time of import until passing into the hands of the manufacturer. A maximum price, based on quotations current in the trade when restrictions were first considered, was fixed for the various types of crude rubber, and the possibilities of profiteering and speculation were limited. These prices, fixed on May 1, c. i. f. New York were as follows:

	Cents per pound. ²
Para Upriver Fine.....	68
Plantation:	
First Latex Crêpe.....	63
Smoked sheets (standard).....	62

All importers before securing an import license were compelled to give to the United States Government an option on "all or any part of the crude rubber" covered by the license, as well as on all other crude rubber at that time or thereafter covered or controlled by the applicant until sold and delivered to a manufacturer.³

In the event of the exercise of this option the prices to be paid by the Government were to be those mentioned above.

The results of the embargo.—It appears that this fixing of rubber prices was an unnecessary expedient, however, since the curtailment of imports had little effect upon the rubber supply of the country. For, first, the stocks on hand on April 1, were the largest in the history of the industry,⁴ and, second, our imports during May, June, and July were much larger than the specified 25,000 tons. The preliminary negotiations leading to the cutting of imports had been held in April, and the anticipation by the trade of some form of restrictions stimulated buying. Large contracts were therefore entered into for the immediate shipment of rubber to the United States in order that stocks might be accumulated before the expected restrictions went into effect. The restrictions of May 8 did not apply to shipments which had left foreign ports prior to that date, and since the time required for transporting rubber from primary markets to

¹ Compare chart of crude rubber prices in "Prices of Rubber and Rubber Products," as above.

² These prices were supplemented on May 14 by maximum prices for other grades of crude rubber; while on May 29, June 13, July 2, and July 6, respectively, still further additions were made. Applicants for import licenses had to guarantee that they would not sell rubber covered by their license to or for any person at a price higher than the fixed prices.

³ Compare letter from the War Trade Board to the Rubber Association of America on Apr. 30, 1918, in the War Trade Board Journal of June, 1918.

⁴ Compare statement by Bertram G. Work, chairman of the War Service Committee of the rubber industry in the India Rubber World, June, 1918.

the United States was considerable the actual imports during the second quarter of 1918 were much greater than the specified 25,000 tons. Indeed, 55,000 tons of rubber entered American ports during May, June, and July.

Finally, the curtailment of the American receipts was immediately felt in the primary markets, where already the decreased consumption of other nations had had its effects. The further elimination of means of disposal naturally led to keen competition among the holders of the existing large stocks and prices tended to fall even below the existing low level.

The result then was that allocated Upriver Para rubber sold in September for 58 cents per pound and Plantation First Latex Crêpe sold for 37 cents per pound¹ as compared with the fixed maxima respectively of 68 cents and 63 cents. On December 12, restrictions as to the amount of rubber to be licensed for import from overseas were withdrawn as were also the maximum price and allocation features of the import regulations.

SILK.

The second presidential proclamation on imports, issued February 14, 1918, included silk among the commodities for which import licenses were to be required.

In order to discourage imports for speculative purposes, the War Trade Board, on September 3, 1918, revoked all outstanding licenses for the importation of silk noils, silk noil yarn, garnetted stock, silk waste, spun silk, and pierced cocoons for shipment after September 10. The United States Government was to have an option to purchase all silk of the above varieties for which import licenses were issued after September 3, at a price 2 per cent above the cost at the foreign ports of shipment, including all charges except prepaid freight and prepaid insurance.

¹ This variation in the price of the two types of rubber is to be explained by changes which were made in the import program in August and September. The War Trade Board had at first failed to make allowance for the large amount of water in Brazilian rubber and the high price of this type of rubber resulted in the American consumer giving preference to rubber from the Far East, and imports from Brazil decreased steadily from June to August. The former factor was eliminated about a month after import restrictions became effective, and in order to further stimulate the importation of Brazilian rubber the War Trade Board ruled in early August that during the months of August and September rubber importers should replace 50 per cent of the rubber utilized in Government contracts by Brazilian rubber. The result of these provisions for stimulating imports became apparent in September, and imports from Brazil increased 54 per cent over the month of August. The results attained, however, were not up to expectations, and on Sept. 26, the ruling relative to the use of Brazilian rubber was supplanted by an order of the War Trade Board requiring that at least one-fourth of the total amount of imports authorized should be licensed from South and Central America. With the production of the Plantations over six times as large as that of South America, these regulations led to a heavy oversupply of the Plantation variety of rubber and keener bidding at Plantation markets for the right to ship to American ports. It should be added also that the maintenance of relatively normal values by Brazilian rubber was in part to be accounted for by the stabilizing control over its price by the Bank of Brazil.

7. THE WAR DEPARTMENT.

The War Department expended \$14,244,061,000 from the declaration of war in this country to April 30, 1919, and was given a hand in the general price-fixing program by reason of its interest in Army purchases.¹ The large purchases which the War Department began making soon after April 6, 1917, indeed, and the erratic behavior of the market, were among the main causes for the control over raw-material prices by the Government.

The quantity of goods required to feed and clothe the Army was great enough vitally to affect market quotations. The statistics branch of the General Staff has estimated the total purchase by the Army for subsistence from April 2, 1917, to May 3, 1919, as \$1,093,636,623.² The total Army purchases for clothing from the beginning of war to May 31, 1919 amounted to \$1,212,066,018, and those for equipage to \$254,721,400. There follows an itemized list of the clothing commodities purchased by the War Department from the beginning of war to May 31, 1919, and the unit price for each commodity, as given by the statistics branch of the General Staff. A similarly itemized list for the equipage purchased follows.

SUBSISTENCE SHIPPED TO AMERICAN EXPEDITIONARY FORCES APR. 1, 1917, TO DEC. 1, 1918.

Item.	Quantity (pounds unless otherwise specified).	Unit price.	Total cost.
Bacon.....	147,956,223	\$0.44	\$65,722,154
Beef, frozen.....	250,584,692	.23	58,536,584
Beef, tinned.....	140,843,476	.32	45,717,792
Flour.....	542,874,797	.05	28,500,927
Tobacco.....	27,449,645	.67	18,407,732
Cigarettes, each.....	2,439,260,097	.006	15,123,412
Reserve rations, each.....	15,623,150	.76	11,875,594
Sugar.....	106,169,345	.07	7,888,382
Cheers, each.....	160,180,225	.05	7,768,741
Butter and substitutes.....	16,200,799	.40	6,433,337
Tomatoes.....	100,061,789	.06	6,024,924
Beans, baked.....	54,731,786	.10	5,226,886
Jam.....	26,029,028	.19	4,877,840
Coffee.....	39,185,167	.12	4,729,650
Milk, evaporated.....	42,922,743	.11	4,498,303

¹See "The War with Germany," prepared under the direction of Col. Leonard P. Ayers, of the statistics branch of the General Staff, for an itemization of these expenditures.

²There is not available an itemized list of the commodities that made up this total expenditure for foods, and their unit costs. There follows, however, a table showing the individual commodities shipped to the American Expeditionary Forces from Apr. 1, 1917, to Dec. 1, 1918, as reported by the statistics branch of the General Staff, and the unit price of each. Later figures given out by the Staff, which do not have the advantage of carrying unit costs, show that the total expenditures for overseas subsistence from the beginning of war to May 1, 1919, was \$616,134,000.

**SUBSISTENCE SHIPPED TO AMERICAN EXPEDITIONARY FORCES APR. 1, 1917, TO
DEC. 1, 1918—Continued.**

Item.	Quantity (pounds unless otherwise specified).	Unit price.	Total cost.
Fish, salmon.....	30,961,801	.14	4,408,980
Beans, dry.....	39,646,677	.11	4,297,700
Vegetables, dehydrated.....	12,971,985	.30	3,894,010
Lard and substitutes.....	15,781,228	.25	3,861,686
Syrup, gallons.....	6,171,808	.50	3,054,985
Hard bread.....	27,978,830	.13	3,614,865
Candy.....	7,805,053	.28	2,191,667
Rice.....	25,466,547	.08	2,029,684
Prunes.....	15,748,931	.10	1,630,914
Fruit, evaporated.....	8,976,848	.13	1,191,228
Cornmeal.....	16,074,687	.03	736,222
Pickles, gallons.....	1,333,210	.47	625,909
Ham.....	1,772,917	.34	610,283
Corn, sweet.....	7,639,786	.06	431,649
Emergency rations, each.....	765,400	.53	401,835
Vinegar, gallons.....	1,319,877	.28	367,586
Oatmeal.....	4,661,732	.06	296,020
Peas, green.....	4,689,425	.06	262,603
Peaches, canned.....	2,415,182	.11	255,643
Hominy.....	1,826,269	.09	155,962
Beans, stringless.....	2,148,759	.06	127,205
Salt.....	13,707,276	.009	120,624
Pears, canned.....	1,150,120	.10	117,542
Apples, canned.....	1,831,096	.06	117,007
Cheese.....	314,203	.28	87,182
Pineapples, canned.....	899,258	.09	82,012
Apricots, canned.....	863,415	.09	78,743
Cherries, canned.....	423,444	.12	51,703
Total.....			327,659,907

CLOTHING PURCHASED BY THE ARMY DURING THE WAR.

	Purchased.	Unit price.	Approximate value.
Breeches and trousers, wool.....	21,768,220	\$6.70	\$145,847,074
Breeches, cotton.....	14,154,000	1.69	23,920,260
Boots, rubber.....	2,964,932	5.08	15,061,854
Belts, waist.....	10,867,000	.23	2,499,410
Caps, overseas.....	5,741,012	.88	5,052,090
Coats, cotton.....	8,872,000	1.96	17,389,120
Coats, denim.....	10,942,000	1.55	16,960,100
Coats, wool.....	13,870,000	9.79	135,787,300
Drawers, summer.....	41,089,000	.50	20,544,500
Drawers, winter.....	42,468,360	2.00	84,936,720
Hats, service.....	8,220,000	2.00	16,440,000
Leggins, canvas.....	12,494,000	.92	11,494,480
Overcoats.....	8,315,000	12.17	101,193,550
Shirts, flannel.....	26,547,817	3.50	92,917,359
Shoes, field.....	18,760,648	7.45	139,833,878
Shoes, marching.....	11,847,000	4.65	55,088,550
Stockings, cotton.....	20,210,000	.16	3,233,600
Stockings, wool, heavy.....	58,712,000	.55	32,291,600
Stockings, wool, light.....	61,243,000	.35	21,435,050
Trousers, denim.....	11,561,505	1.55	17,920,333
Undershirts, summer.....	48,110,000	.60	28,866,000
Undershirts, winter.....	36,931,000	2.00	73,862,000
Puttees.....	16,771,000	2.20	36,896,200
Raincoats.....	8,481,000	5.21	44,198,010
Hats, denim.....	6,235,000	.24	1,496,400
Jerkins.....	2,236,000	7.50	16,770,000
Mackinaws.....	635,000	14.00	8,890,000
Gloves, leather.....	7,254,000	1.07	7,761,780
Gloves, canton flannel, lp.....	2,632,000	.48	1,263,360
Mittens, canton flannel.....	5,007,000	.46	2,303,220
Mittens, leather.....	9,357,000	1.16	10,854,120
Gloves, wool.....	17,283,000	.65	11,233,950
Gloves, jersey knit.....	9,927,000	.25	2,481,750
Oilskin coats.....	873,000	2.52	2,199,960
Oilskin trousers.....	868,000	2.58	2,239,440
Oilskin hats.....	1,220,000	.75	915,000
Total.....			1,212,066,018

EQUIPAGE PURCHASED BY THE ARMY DURING THE WAR.

	Purchased.	Unit price.	Approximate value.
Barracks bags.....	8,982,000	90.85	\$7,634,700
Bedsocks.....	9,581,000	1.10	10,539,100
Blankets, com.....		6.00	
Blankets, 3 pounds.....	14,167,000	6.50	92,065,500
Blankets, 4 pounds.....	7,106,000	8.00	56,848,000
Tents, hospital, drop.....	8,090	92.18	745,736
Tents, hospital, ward.....	21,142	227.19	4,803,251
Tents, pyramidal.....	500,341	76.73	38,391,166
Tents, shelter, halves.....	7,499,437	2.62	19,648,526
Tents, storage.....	21,108	136.11	2,873,010
Tents, wall, large.....	71,705	80.08	5,742,136
Tents, wall, small.....	76,178	43.71	3,329,740
Latrine screen.....	64,114	18.73	1,200,856
Paulins, large.....	145,420	72.69	10,570,580
Paulins, extra large.....	12,511		
Paulins, small.....	13,647	22.65	309,104
Total.....			254,721,400

There follows a summary of the value of overseas shipments of quartermaster material in the main from April 6, 1917, to December 1, 1918, as compiled by the statistics branch of the General Staff.

Overseas shipments.

Clothing, equipage, etc., shipped with troops.....	\$326,000,000
Subsistence.....	327,059,997
Clothing.....	269,451,890
Forage.....	21,106,138
Remount.....	\$15,219,878
Fuel.....	12,608,353
General supplies.....	11,807,118
Horse-drawn vehicles.....	7,247,522
Harness.....	4,957,993

(1) THE ARMY REPRESENTED ON THE PRICE-FIXING COMMITTEE.

Virtually every instance of price fixing that had been undertaken by the War Industries Board prior to March, 1918, had its inception in the fact of large Government purchases which needed protection against unstable markets. It was not surprising, therefore, that when the price-fixing committee was created there should have been appointed to it a representative of the Army, despite the fact that the President in his letter had not so provided.¹ It was the duty of the representative of the War Department to present to the committee always the Army point of view, and to carry back to the Army that of the committee.

¹ The first representative of the Army upon the price-fixing committee was Brig. Gen. Palmer E. Pierce, but Lieut. Col. R. H. Montgomery served in that capacity from May 29, 1918 (S. O. 126), until the committee resigned.

(2) THE PRICE-FIXING SECTION.

As time went on it became necessary for the Army to determine fair prices for its own purchases upon commodities that had not been fixed by the price-fixing committee. It frequently had occasion, for example, to determine differentials from the base prices set by the price-fixing committee and less important base prices. A new order was accordingly issued by the War Department September 4, 1918 (S. C. No. 88), creating a price-fixing section within the Army, whose chief was to be the representative of the Army on the price-fixing committee, and with the following duties:

To conduct inquiries as to fair prices and departure from such prices, to advise agencies of the War Department in relation thereto, and to represent the War Department on the price-fixing committee of the War Industries Board.

(3) COMMANDEERING AND REQUISITIONING.

It was not always possible satisfactorily to secure commodity requirements from the market at prices set by the price-fixing committee or the price-fixing section, and the Army resorted frequently to the practice of commandeering and requisitioning. The commander orders were compulsory orders to manufacture certain products, and the requisition orders were those taking over properties or stocks for use by the Government.¹

A considerable confusion arose late in 1917 and early in 1918 by reason of the decentralization of seizure orders, and on March 22, 1918 (General Orders, No. 27) a commandeering section was established to bring uniformity of procedure in the requisitioning and commandeering of property. There had been 164 different requisitions issued by the several bureaus of the War Department prior to the establishment of the commandeering section. Another 341 requisitions, affecting 2,501 persons or companies, were issued after the creation of the section. There had been 370 compulsory orders issued prior to the establishment of the commandeering section. Another 626 compulsory orders, affecting 732 persons or companies, were issued after the creation of the section. The commandeering section, in its report following the signing of the armistice, estimated that the approximate value of all property requisitioned and secured under compulsory order was \$141,687,000.²

¹ The main authority for commandeering was had from section 120 of the national defense act (H. R. 12766, Public No. 85), approved June 8, 1916; and that for requisitioning section 10 of the food and fuel control act (H. R. 4961, Public No. 41), approved Aug. 10, 1917.

² There follows a summary and itemized list of properties taken for military purposes by requisitioning or compulsory orders, during the war:

1. Real property, improved and unimproved, title taken-----	\$15, 697, 000
2. Personal property -----	125, 990, 000
Total, title taken-----	<u>141, 687, 000</u>

(4) THE BOARD OF APPRAISERS.

The duty of determining compensation for properties requisitioned or commandeered was placed upon the board of appraisers, established by General Orders, No. 30, on April 1, 1918. The board, as then constituted, was composed of Lieut. Col. John S. Dean and Lieut. Col. R. H. Montgomery, and was given the following duties:

To determine, by appropriate methods, just compensation of all properties of whatever kind, real, personal, and mixed, for the seasons of occupancy of any property, first, which shall hereafter during the existing emergency be ordered requisitioned, commandeered, or otherwise formally taken over according to law, through, by, or by direction of, the Secretary of War for the direct and special use of the armies; or, second, which has heretofore, during the present emergency, been directly taken over and the determination, of just compensations for which has not been concluded, or is not under consideration by the special board.

To determine all elements of valuation, in all useful or necessary phases of such valuation, included as items of cost in any contract in which such elements affect the rights and obligations of the Government and which shall

3. Real property (improved and unimproved, including plants and transportation facilities) use and occupation taken (value per annum)-----	3, 146, 000
4. Personal property (vessels), use and occupation taken (value per annum) -----	126, 047, 000

Total, use and occupation taken (value per annum)----- 129, 193, 000

The more important of the commodities that were taken through requisitioning or compulsory orders by the War Department, found by segregating the items classified under personal property, follow in order of their values.

1. Cotton goods, silks, gauze, etc-----	\$56, 086, 700
2. Toluol -----	17, 211, 600
3. Wood chemicals-----	16, 092, 200
4. Platinum-----	9, 747, 200
5. Subsistence supplies-----	6, 854, 300
6. Machine guns and ammunition-----	5, 720, 500
7. Caustic soda-----	2, 899, 300
8. Nitrate of soda-----	2, 598, 700
9. Spruce-----	1, 124, 300
10. Carbon tetrachloride-----	1, 110, 100
11. Machine tools-----	975, 200
12. Folding steel hospital beds-----	750, 000
13. Bleach powder-----	590, 000
14. Building materials-----	551, 800
15. Machinery-----	289, 900
16. Thermometers-----	284, 900
17. Typewriter ribbon cloth-----	269, 900
18. Acetylene cylinders-----	260, 400
19. Phenol-----	250, 700
20. Tin-----	227, 900
21. Locomotive cranes-----	203, 200
22. Chestnut extract-----	189, 900
23. Steel wire-----	169, 200
24. Sulphate of ammonia-----	124, 700
25. Boilers-----	115, 000
26. Leather gloves-----	71, 700
27. Brass-----	66, 100
28. Sulphuric acid-----	64, 000
29. Dimethylaniline-----	33, 900
30. Tapioca flour-----	29, 400
31. Miscellaneous-----	26, 200

hereafter during the present emergency be entered into by the bureau of the War Department, or any official of any such bureau whenever the contract itself shall not provide for and require a different method of determination; and likewise to determine such elements included in any such contract hereinbefore entered into during the present emergency where such determination is not otherwise provided for or required, or has not been concluded, or is not the subject of consideration by the special board.

The board of appraisers, between April 1, 1918, and November 22, 1918, was presented with 1,147 different requisition compulsory orders and clearances for the determination of a just value.

8. THE NAVY DEPARTMENT.

The Navy Department had no more authority than the War Department for fixing the prices of commodities to the public. It, by virtue of the enormous purchases for its own supplies, was represented on the price-fixing committee and the commodity sections of the War Industries Board. The purchasing of supplies for the Navy was concentrated on the Bureau of Supplies and Accounts, which undertook frequently to determine "fair and reasonable" prices.¹

(1) COMMODITIES PURCHASED BY THE NAVY.

The bulk of purchases made by the Navy during the war, like those made by the Army, was a considerable factor in prompting the price-fixing committee and the War Industries Board to extend control over certain commodities. The Navy purchased a quantity of nonferrous metals amounting in value to \$71,218,289; steel and iron valued at \$91,846,654; woolens and equipment valued at \$96,400,000; lumber valued at \$5,918,822; provisions (obtained through allocation) valued at \$7,427,260; and chemicals and explosives valued at \$100,827,611.

There follows a summary of the volume of purchases made by the Navy of the more important commodities, as recorded in the annual report of the Paymaster General for 1918:

NONFERROUS METALS.

Commodity.	Quantity.	Value.
Copper.....	150,031,522 pounds.....	\$35,257,407.67
Lead.....	24,833,000 pounds.....	1,800,392.50
Tin.....	1,850,500 pounds.....	1,184,320.00
Antimony.....	222,008 pounds.....	28,632.41
Monel metal.....	1,263,404 pounds.....	514,837.13
Steel wire rope.....	85,105,281 pounds.....	7,750,884.36
Nickel.....	219,900 pounds.....	83,560.00
Zinc.....	45,810,433 pounds.....	5,997,251.96
Aluminum.....	597,229 pounds.....	197,085.56
Portland cement.....	1,151,098 barrels.....	1,980,403.24
Copper products.....	7,695,998 pounds.....	² 6,623,502.95
Brass products.....	28,527,258 pounds.....	9,798,010.00
		71,218,289.78

¹ An excellent account of the price and purchase work of the Navy during the war to the summer of 1918, is given in the Annual Report of the Paymaster General of the Navy for the fiscal year 1918.

² Ex-copper furnished by Government; value, including copper furnished by Government, \$10,695.60.

STEEL AND IRON.

Commodity.	Quantity.	Value.
Steel.....	517,828,000 pounds.....	\$20,790,368.98
Forgings and ingots.....	50,943,104 pounds.....	16,417,288.00
Anchors.....		1,294,667.00
Chain iron.....	10,000,000 pounds.....	562,500.00
Castings.....	5,960,000 pounds.....	628,030.00
Pig iron.....	68,264,000 pounds.....	1,012,018.00
Rails.....	26,280,000 pounds.....	633,000.00
Mine anchors.....	40,000.....	2,080,000.00
Extender mechanisms.....	50,000.....	155,000.00
Tin plate.....	194,768 pounds.....	46,517.00
Pipe.....		1,188,322.67
Iron ore.....	201,600 pounds.....	587.70
Tubing.....	7,730,514 feet.....	1,609,338.00
Railroad equipment.....		2,037,742.00
Machine tools.....		17,570,468.33
Chain.....	25,985,300 pounds.....	2,600,000.00
Armor plate.....	2,430,000 pounds.....	483,600.00
Bolts, nuts, and rivets.....	32,643,450 pounds.....	2,131,504.00
Hand tools.....		259,966.00
Miscellaneous.....		9,635,028.00
Fittings.....		930,681.00
Alloy steel.....		8,090,000.00
Tool steel.....		1,500,000.00
		91,846,654.68

WOOLENS AND EQUIPMENT.

Overcoating.....	1,600,000 yards.....	\$9,000,000.00
Uniform cloth.....	7,000,000 yards.....	22,000,000.00
Flannels (billiard cloth, scarlet cloth, etc).....	2,063,000 yards.....	5,000,000.00
Blankets.....	735,000 yards.....	5,500,000.00
Bunting.....	4,285,000 yards.....	1,500,000.00
Australian, domestic, and South American wool (grease).....	12,000,000 yards.....	7,500,000.00
Denim.....	14,800,000 yards.....	4,000,000.00
Drill.....	29,630,000 yards.....	7,000,000.00
Canvas and duck.....	10,000,000 yards.....	8,000,000.00
Cotton check lining.....	1,850,000 yards.....	\$500,000.00
Surgical gauze.....	975,000 yards.....	800,000.00
Leggings.....	865,000 pairs.....	900,000.00
Mattress ticking.....	2,647,000 yards.....	900,000.00
Nainsook.....	1,736,000 yards.....	350,000.00
Muslin.....	800,000 yards.....	150,000.00
Pillow cases.....	140,000.....	1,000,000.00
Sheets.....	230,000.....	
Sheeting.....	1,500,000 yards.....	75,000.00
Pajamas.....	46,000 pairs.....	
Towels.....	270,000.....	1,000,000.00
Toweling.....	2,900,000 yards.....	
Cotton waste.....	7,200,000 pounds.....	900,000.00
Handkerchiefs.....	3,850,000.....	250,000.00
Twine.....	865,000 pounds.....	\$450,000.00
Thread.....	1,000,000 spools.....	800,000.00
Do.....	320,000 cones.....	
Underwear.....	2,335,000 suits.....	6,000,000.00
Socks.....	423,000 pairs (heavy).....	1,500,000.00
Do.....	1,940,000 pairs (merino).....	
Do.....	2,500,000 pairs (cotton).....	
Jerseys.....	475,000.....	2,000,000.00
Watch caps.....	555,000.....	500,000.00
Shoes.....	885,000 pairs.....	4,000,000.00
Rubber boots and arctics.....	150,000 pairs (arctics).....	1,500,000.00
Do.....	315,000 pairs (boots).....	
Neckerchiefs.....	708,000.....	850,000.00
Ribbon.....	500,000 yards.....	75,000.00
Grommets, buttons, and other accessories.....	50,000 gross (grommets).....	1,000,000.00
	260,000 gross (buttons).....	
	770,000 (brushes and whisks).....	800,000.00
Mattresses and cots.....	100,000 mattresses.....	
	20,000 cots.....	300,000.00
Burlap, hemp, and kapok.....	300,000 yards (burlap).....	
	290,000 pounds (hemp).....	
	400,000 pounds (kapok).....	300,000.00
Netting, braid, tape, etc.....	150,000 yards (netting).....	
	750,000 yards (braid).....	
	15,000 spools (tape).....	
		96,400,000.00

LUMBER.

Commodity.	Quantity.	Value.
Yellow pine.....	76,586,917 feet.....	\$1,838,086.01
Douglas fir.....	22,972,560 feet.....	528,369.28
North Carolina pine.....	12,683,796 feet.....	380,513.88
Oak.....	10,410,066 feet.....	884,855.61
Spruce.....	9,368,500 feet.....	374,740.00
White pine.....	6,828,000 feet.....	546,240.00
Cypress.....	3,522,950 feet.....	264,221.25
Ash.....	1,797,000 feet.....	197,670.00
Yellow-pine decking.....	1,432,000 feet.....	143,200.00
Redwood.....	1,059,000 feet.....	47,655.00
White cedar.....	1,056,000 feet.....	100,320.00
Poplar.....	1,016,000 feet.....	81,280.00
Hemlock.....	826,000 feet.....	19,824.00
Beech, birch, and maple.....	445,000 feet.....	31,150.00
Mahogany.....	362,800 feet.....	90,700.00
Port Orford cedar.....	245,000 feet.....	24,500.00
Maple.....	112,000 feet.....	8,960.00
Basswood.....	90,000 feet.....	6,300.00
Sugar pine.....	75,000 feet.....	4,500.00
Sitka pine.....	65,000 feet.....	3,250.00
Walnut.....	27,000 feet.....	4,050.00
Laurel.....	23,500 feet.....	2,115.00
Hickory.....	15,500 feet.....	2,325.00
Cherry.....	1,000 feet.....	140.00
Lignum vitae.....	213,000 pounds.....	10,650.00
Crossties.....	57,366 pieces.....	71,707.50
Piling.....	12,400 pieces.....	173,600.00
Juniper poles.....	8,500 pieces.....	21,500.00
Douglas fir spars.....	1,495 pieces.....	44,850.00
Spruce poles.....	1,425 pieces.....	855.00
		5,918,822.633

PROVISIONS (OBTAINED THROUGH ALLOCATION).

Item.	Quantity.	Approximate value.
Apples, evaporated.....	1,208,000 pounds.....	\$163,120.00
Apples, tinned.....	2,000,000 pounds.....	127,600.00
Apricots, tinned.....	2,660,000 pounds.....	230,500.00
Beans, lima, dried.....	3,462,000 pounds.....	415,440.00
Beans, navy.....	15,000,000 pounds.....	1,762,500.00
Beans, string.....	3,978,000 pounds.....	358,900.00
Catsup.....	519,000 gallons.....	519,000.00
Corn, tinned.....	6,630,000 pounds.....	552,500.00
Peaches, evaporated.....	728,000 pounds.....	72,800.00
Peaches, tinned.....	4,066,000 pounds.....	361,400.00
Pears, tinned.....	2,885,000 pounds.....	262,850.00
Prunes.....	2,800,000 pounds.....	553,650.00
Pumpkin.....	1,678,000 pounds.....	67,800.00
Salmon.....	2,850,000 pounds.....	415,700.00
Sauerkraut.....	2,782,000 pounds.....	163,500.00
Tomatoes.....	13,100,000 pounds.....	900,000.00
Peas.....	6,000,000 pounds.....	500,000.00
		7,427,260.00

CHEMICALS AND EXPLOSIVES.

Commodity.	Quantity.	Value.
Petroleum.....	217,749 gallons.....	\$59,928.00
Turpentine.....	33,600 gallons.....	20,477.00
Linoleum.....	182,464 square yards.....	212,324.00
Ethylac.....	9,000 pounds.....	5,130.00
Garnetlac.....	987 bags.....	69,700.00
Varnish.....	213,505 gallons.....	151,819.70
Paint drier.....	408,576 gallons.....	123,663.00
Lubricating oil.....	3,402,981 gallons.....	1,227,072.00
Kerosene oil.....	444,182 gallons.....	88,201.00
Sperm oil.....	31,400 gallons.....	53,668.00
Linseed oil (boiled and raw).....	201,626 gallons.....	228,743.00
Lard.....	57,050 gallons.....	53,387.00
Castor oil.....	79,740 gallons.....	160,340.00
Miscellaneous paints.....		300,000.00
Coke.....	13,294 tons.....	105,881.00

CHEMICALS AND EXPLOSIVES—Continued.

Commodity.	Quantity.	Value.
EXPLOSIVES (INCLUDING RAW MATERIALS AND FREIGHT WHEN FURNISHED BY NAVY).		
TNT, grade "A".....	10,527,000 pounds.....	\$5,633,500.00
TNT, grade "B".....	72,012,000 pounds.....	29,033,250.00
TNX.....	30,000,000 pounds.....	13,290,400.00
Smokeless powder.....	59,800,000 pounds.....	32,068,892.70
Black powder.....	1,151,750 pounds.....	298,064.50
Ammonium picrate.....	4,550,000 pounds.....	2,904,000.00
Picric acid.....	20,000 pounds.....	12,500.00
Tetryl.....	20,000 pounds.....	18,000.00
Chemicals for gas shells (estimated).....		327,000.00
Priming caps.....	18,160,000 caps.....	391,756.00
CHEMICALS.		
Acetone.....	14,100 pounds.....	5,499.50
Aluminum sulphate.....	40,000 pounds.....	720.00
Ammonia, anhydrous.....	305,000 pounds.....	86,748.26
Ammonia, aqua.....	34,000 pounds.....	2,720.00
Ammonia, chloride.....	506,800 pounds.....	57,020.70
Ammonium phosphate.....	40,000 pounds.....	6,000.00
Barium chlorate.....	11,000 pounds.....	1,980.00
Borax.....	41,800 pounds.....	4,319.50
Calcium carbide.....	762,000 pounds.....	23,745.00
Calcium chloride.....	17,000 pounds.....	1,331.67
Calcium magnesium chloride.....	162,000 pounds.....	7,452.00
Calcium phosphide.....	5,750 pounds.....	6,365.00
Carbon tetra-chloride.....	410,000 pounds.....	45,100.00
Cartridge bag cloth.....	1,070,000 square yards.....	744,800.00
Diphenylamine.....	50,000 pounds.....	30,000.00
Dope, acetate.....	12,000 gallons.....	56,212.87
Dope, nitrate.....	13,000 gallons.....	27,219.00
Ethyl chloride.....	24,000 pounds.....	22,080.00
Ethyl chloride drums.....	400 pounds.....	16,000.00
Gas, carbon dioxide.....	150,000 pounds.....	5,000.00
Gas, hydrogen.....	1,440,000 cubic feet.....	22,400.00
Gas, oxygen.....	2,815,000 cubic feet.....	29,898.30
Glue, dry.....	6,500 pounds.....	21,678.00
Glue, liquid.....	1,150 gallons.....	2,651.90
Glue, marine.....	606,000 gallons.....	\$50,504.00
Glycerine.....	32,600 gallons.....	208,807.00
Iron, reduced.....	600 pounds.....	540.00
Magnesium carbonate.....	75,000 pounds.....	7,125.00
Nitrating cotton.....	4,200,000 pounds.....	364,980.00
Phenylcinchoninic acid.....	10,000 ounces.....	11,500.00
Platinum and Iridium.....	1,417.30 ounces.....	149,868.60
Potassium permanganate.....	775 pounds.....	2,572.75
Salicylic acid.....	1,500 pounds.....	2,872.00
Soda ash.....	538 tons.....	16,583.31
Sodium benzoate.....	500 pounds.....	2,000.00
Sodium carbonate.....	42,250 pounds.....	2,345.50
Sodium chlorate.....	92,000 pounds.....	16,560.00
Sodium cyanide.....	11,300 pounds.....	3,004.00
Sodium fluoride.....	11,200 pounds.....	1,904.00
Sodium silicate.....	127,000 pounds.....	5,167.50
Soap, cleaning and polishing.....	32,800 cakes.....	1,927.00
Soap, laundry.....	1,706,500 pounds.....	156,543.75
Soap, salt water.....	7,890,000 pounds.....	483,646.00
Soap, toilet.....	35,000 pounds.....	11,129.30
Soap, washing powder.....	2,182,500 pounds.....	144,774.75
Silver nitrate.....	12,136 ounces.....	3,827.24
Zinc dust.....	35,700 pounds.....	3,213.00
Lead for painting purposes.....	3,330,100 pounds.....	323,579.00
Zinc oxide.....	6,565,993 pounds.....	729,433.00
Alcohol.....	505,660 gallons.....	333,695.00
Mercury.....	33,993 flasks.....	3,569,892.00
Sodium nitrate (for Indianhead).....	10,000 long tons.....	800,000.00
Acids:		
Carbolic.....	250,000 pounds.....	97,500.00
Hydrochloric.....	206,800 pounds.....	6,150.00
Hydrofluoric.....	117,200 pounds.....	13,177.50
Nitric.....	55,658 pounds.....	8,857.77
Oxalic.....	200 pounds.....	97.50
Sulphuric—		
Fuming.....	35,100 tons.....	1,666,700.00
68° Baumé.....	1,156,780 pounds.....	19,076.00
66° Baumé.....	28,900 tons.....	804,160.00
60° Baumé.....	17,200 tons.....	311,400.00
Carbon electrodes.....	800 electrodes.....	53,520.00
Caustic soda.....	6,325 tons.....	507,750.00
Caustic soda (concentrated lye).....	580,000 pounds.....	41,797.00
Ferroalloys.....		1,587,891.00
Sulphur.....	5,001.41 tons.....	152,635.25
		100,827,611.32

(2) REPRESENTATION OF THE NAVY UPON THE PRICE-FIXING COMMITTEE.

The Navy was represented on the price-fixing committee by Paymaster John M. Hancock, whose relation to it was like that of the Army representative on the same committee. It should be added that the task of making Navy purchases was expedited by the formation of commodity sections within the Navy, whose chiefs were members of and participated in the deliberations of the commodity sections of the War Industries Board.

(3) COMMANDEERING.

In peace-times Navy purchases were made in the open market, but during the war resort was frequently had to commandeering and mandatory orders.¹ The scope of the newly created naval board of commandeering was extended on February 1, 1918, "to act as a clearing house to supply all the Navy with information at hand, giving consideration to quantities, material, prices, suitability for Navy use, and other data relative to the stores produced." The work of the board consisted in making inventories of goods of interest to the Navy stored in warehouses and held by banks and forwarding agents for export.

The Paymaster General gives the following account of the procedure followed by the Navy in taking tin at a time when the market was rising:

In the fall of 1917, 27,000 pounds of tin were urgently needed. The tin market was jumping out of bounds. Several dealers were called upon without result. The collector of customs at the port of New York was called by long distance telephone. He advised that a ship was in with a cargo of 250 tons consigned to three companies. The 18 tons required by the Navy were apportioned among those three companies and the tin paid for at 64 cents per pound, the approximate value before the market began to rise. With this beginning, arrangements were gradually made to restrain all tin warehoused in New York found to meet Navy specifications. Through the commandant at New York, approximately 2,000 tons were placed under seal. This action prompted a dealer to place at the Navy's disposal 700 tons additional, which was contracted for at 64 cents per pound, the market price at that time being 80 cents per pound.

Provisions were secured for the Navy generally by allocation or competition. But in January, 1918, it became necessary to obtain some Kotinashi (white) and Kintoki (kidney) beans by a joint

¹The principal statutes relating to price control, and authorizing commandeering and mandatory orders for use by the Navy were the Naval appropriation act, Public No. 479 of Mar. 4, 1911, and succeeding years; naval appropriation act, Mar. 4, 1917, naval engineering fund (Public, No. 391, 64th Cong.); the urgent deficiency act of June 15, 1917; the food and fuel act, Public No. 4, 65th Cong., of Aug. 10, 1917; and the naval appropriation act, July 1, 1918 (Public No. 182, 65th Cong.).

Army and Navy commandeered, whereby 42,000,000 pounds of beans were secured in California. This notable instance of commandeering, one of the first large cases of food seizure in our history, was the more interesting since the Navy saved to itself middlemen's profits by commandeering the cargo by a radio message before the ships reached port.

Another interesting instance of control was that exercised by the Navy over the prices of canvas, which is described in the annual report of the Paymaster General as follows:—

Unusually heavy demands for certain numbers and weights of canvas and duck in the fall of 1917 made it necessary for the Navy to go into the market rather heavily. In view of the abnormally high prices prevailing in the commercial market, manufacturers were apparently unwilling to bid. The War Industries Board was requested to provide the Navy with information as to the mills from which the Navy could expect deliveries within a reasonably short time. When this complete list was received, mandatory orders were issued with a provisional price set at the figure which appeared just on the basis of all available data in the hands of the Navy. The receipt of these orders at this provisional price appeared to occasion some concern in the industry and drew forth replies to the effect that the material could not be supplied. The Navy referred these claims of inability to supply to the subcommittee of the War Industries Board. This committee had stated, at the time of furnishing the Navy with the information used, that the capacity of every available loom was known to it. The protest then became one as to price, the industry claiming that the material could be supplied but that the Navy's price was entirely unreasonable. To this statement the Navy replied with the request for facts and cost figures substantiating the claims for a higher price, assuring the manufacturers of a fair profit over and above manufacturing cost. Owing to non-receipt of the requested figures, the case lapsed. Subsequently the war service committee of the cotton industry accepted for the trade a price practically identical with the provisional price set by the Navy. Not only did this action save money directly for the Navy, but it also served as an anchor for Army and civilian purchases, since the canvas mills were obviously unable to explain any material discrepancy to other buyers over and above the price at which the Navy was obtaining canvas.

A situation similar to that of canvas arose with regard to denim. When the manufacturer asked 40 cents a yard for his material, the Navy served an order for the quantity needed at about 34 cents—a difference of over \$120,000 from his quotation. The manufacturer finally admitted the justice of the Navy price and requested a transfer from a Navy order to a voluntary contract.

(4) THE SUPPLY OF RAW MATERIALS TO CONTRACTORS BY THE NAVY.

One of the unique and effective methods by which the Navy assured itself of the completion of contracts at reasonable rates was its practice of supplying raw materials to its contracting manufacturers. The Navy, for example, bought 3,000,000 pounds of wool in

July, 1917, and offered that wool to its cloth contractors at a reasonable price. The contractors thus were in a position to ignore exorbitant quotations made by private wool dealers, and to buy of the Government. The Navy's holdings generally prevented the price on contractors' options from exceeding the price set by the Navy on its own supply.

In a like manner the Navy arranged for a purchase of about 25,000 bales of Australian wool from the British Government. Since the trade did not know generally how small an amount the Navy had, and the consequent ease with which it could be exhausted, there was given to contractors an effective weapon for making private purchases at reasonable figures. It was estimated that the direct saving brought about by this wool purchase amounted to \$1,500,000.

The success of the Navy with its original small wool purchase became the basis for joint action by the war agencies in importing foreign wools and in taking over the entire domestic clip.¹

(5) DETERMINATION OF "FAIR AND JUST" PRICES.

When the commodity specialists within the Navy found that prices quoted by bids received in the regular openings were unjust, those bids were rejected and a Navy mandatory order issued. The work later followed of determining a "just" price for the materials taken by seizure.

In the determination of a "just" price the Navy made extensive use of cost data supplied by the contractor, the Federal Trade Commission, or opinions expressed by the commodity sections of the War Industries Board. A Navy accounting officer was also ordered to the plant to report on the cost of manufacture. The Navy worked out with remarkable precision the factors that would be allowed as costs, and endeavored to standardize them.

¹ Annual report of the Paymaster General for 1918.

9. THE FEDERAL TRADE COMMISSION.

In the field of public price control during the war the Federal Trade Commission has performed primarily an advisory function by collecting and interpreting for the price-fixing agencies data on costs of production. In the case of news-print paper, however, the activities of the commission have extended somewhat further and have taken the form of administrative control over prices.

The regulation of the prices of news-print paper differs materially from the instances of war-time price fixing, in that the need for regulation appeared and the preliminary steps in the control were taken considerably before the entry of this country into the war. On April 24, 1916, the United States Senate, impelled by the receipt of numerous complaints from publishers, adopted the following resolution:

That the Trade Commission is hereby requested to inquire into the increase of the price of print paper during the last year, and ascertain whether or not the newspapers of the United States are being subjected to unfair practices in the sale of print paper.¹

Upon the passage of this resolution the Federal Trade Commission undertook an investigation into the prices and distribution of news-print paper. Finally, after a series of conferences between the manufacturers, publishers, and the commission, at a conference on January 26, 1917, it was suggested that the Federal Trade Commission should "arbitrate the question of what was a fair and reasonable price for the sale of news-print paper."² This the commission agreed to do, and on March 4, 1917, the prices upon which it had determined were announced and were accepted by a number of the news-print paper manufacturers of this country and of Canada.

After this agreement was adopted a Federal grand jury for the southern district of New York found indictments against four of the signatories to the agreement for violation of the Sherman anti-trust law. These signatories, accordingly, withdrew from the agreement, which soon collapsed. On November 26, 1917, a new agreement was made between Thomas W. Gregory, Attorney General of the United States, as trustee, and certain persons and corporations engaged in the manufacture and sale of news-print paper. It was

¹ S. Res. 177, 64th Cong., 1st sess., adopted Apr. 24, 1916.

² Report of the Federal Trade Commission on the news-print paper industry, June 13, 1917.

provided in the agreement that the Federal Trade Commission should fix the maximum prices and terms of sale of the output of the news-print paper of the 10 signatory companies sold to purchasers in the United States for the duration of the war and three months thereafter.

The findings and award of the Federal Trade Commission, concerning prices and terms of contract and sale of news-print paper, were announced on June 18, 1918. The manufacturers of news-print paper, parties to the agreement, considered the price-awards too low and appealed for a review to the United States circuit court. The decision of this court, rendered September 25, 1918, in the main supported the contentions of the manufacturers and ordered a substantial increase in the original price awards of the commission. The detailed awards and price schedules are reprinted in the second part of this study, which contains the rules and regulations affecting prices adopted by various governmental agencies.

10. THE DEPARTMENT OF AGRICULTURE.

Distinct lines of service for the Food Administration and the Department of Agriculture were clearly drawn at the outset in order that neither should intrude upon the field of the other. The Department of Agriculture undertook the stimulation and supervision of the production of foodstuffs, and the Food Administration that of providing for distribution. It was intended, of course, that many rules of the Food Administration should work for a vital increase of production. But measures which related to the producer in the main were administered strictly by the Department of Agriculture.

Little occasion arose for direct administrative action on the part of the Department of Agriculture which might be ascribed to the emergency conditions arising from the war. The only approach to regulation which can be considered as coming within the scope of the food law and which related to prices took place in connection with fertilizers and farm equipment.

(1) THE CONTROL OF FARM EQUIPMENT.

The food supply of the world is peculiarly dependent upon the adequate production of farm equipment, and it was necessary to stimulate production of farm implements without too greatly increasing their prices to the producer.

Farm implements were caught in the current of rising prices because of the rising cost of raw materials and labor, and by the latter part of 1917 their prices were climbing at an extraordinary rate.¹

The American farmers became disturbed and complained that prices were unduly high. Moreover, there were many difficulties encountered in securing certain farm machinery. The needs of the hour, however, were too acute to allow any disorganization or delay in the production of foodstuffs, and it became apparent that govern-

¹ The following index of farm implement prices, based on the average price of 1911, which is made equal to 100, shows the price situation in the farm implement industry during 1917 and early 1918:

	1911	1912	1913	1914	1915	1916	1917	1918
May.....	100	100	98	101	100	102	126	170
October.....	100	100	100	100	101	119	151	.....

Data from Bulletin 847, United States Food Administration, statistical division, information service.

mental regulation of the industry would be necessary to alleviate the situation.¹

Accordingly, under the license provision of the Food Administration, the President required all importers, manufacturers, stores, and distributors² of "tools, utensils, implements, machinery, and certain other farm equipment to secure Federal licenses not later than June 20, 1918," and the execution of the provisions and regulations thereunder were placed in the hands of the Secretary of Agriculture.

Under the regulations promulgated for the industry all records and property of licensees were subject to examination by representatives of the Secretary of Agriculture. Resales within the trade were specifically prohibited to prevent any increase in the price of the product resulting from unnecessary sales.

Beyond this requirement no direct regulation of prices was put into effect. The Department of Agriculture, however, had the power to prevent unfair "commissions, profits, or practices," and ruled that—

A licensee shall not buy, contract for, sell, store, or otherwise handle or deal in any farm equipment for the purpose of unreasonably increasing the price or restricting the supply of any such commodity, or of monopolizing, or attempting to monopolize, either locally or generally, any such commodity.

This regulation gave indirect supervision over the prices of all farm implements.

Agricultural agents were asked to report to Washington the prices that the increased costs of freight, labor, and raw materials had to June, 1918, and price lists were secured from the licensees in order to check prices in each branch of the industry.³ The hoarding of

¹ The difficulties of the situation had early reached Congress, and on May 13, 1918, under Senate Resolution No. 223, the Federal Trade Commission was directed to investigate and report to the Senate the cause or causes of the high prices of agricultural implements and machinery. The investigation at the present date, June 15, 1919, has not been completed.

² Retailers whose gross annual sales were less than \$100,000 were exempted from the license requirements.

³ It is of interest to note that while the Food Administration paid no attention to replacement value in determining selling price, the Department of Agriculture left the question as to whether replacement value would be considered in figuring costs entirely to the individual licensee. The attitude of the Department of Agriculture in this connection is well presented in the following public statement made in the midsummer of 1918:

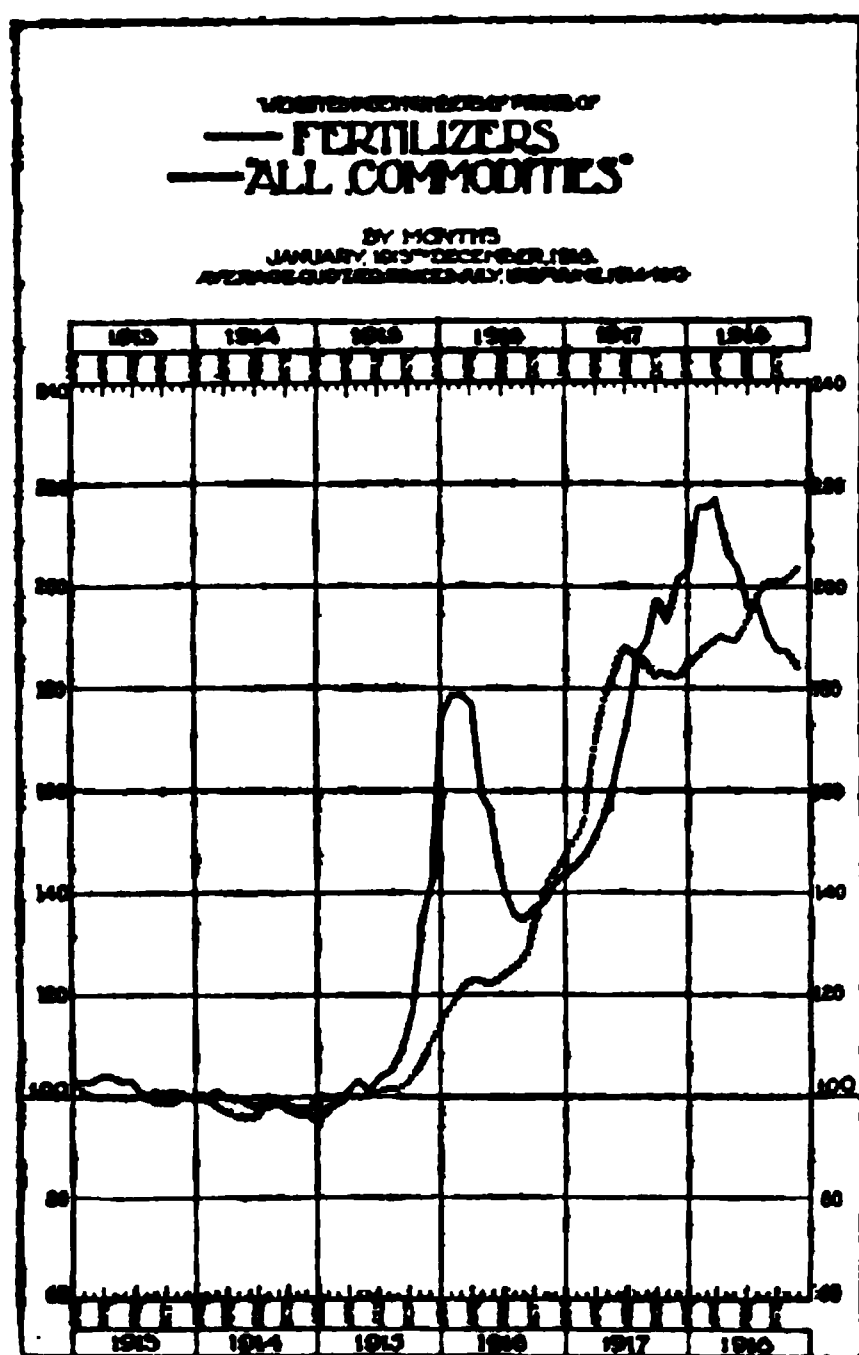
"The prices of farm equipment are more or less seasonal, but if the price should rise or fall during the season, then, to be consistent, a person who wishes to sell on the basis of replacement values would be obliged to sell at a loss if the price fell. Equipment carried over from one season to another—that is, the residual from a previous season's reasonable supply—should be considered in the same manner. Therefore, if persons have sold at replacement values, they must continue to do so when a drop in prices comes, and carry the same amount of stock as in the beginning throughout the period of the high prices in order not to profiteer.

"In short, it will not be considered profiteering if farm equipment is sold on the basis of replacement prices, provided the goods sold are replaced at once at replacement prices and this practice is continued during the period of high prices caused by the war."

agricultural implements was declared illegal, and "the holding, contracting, or arranging for a quantity of equipment in excess of reasonable requirements" was considered evidence of hoarding.

In the autumn of 1918 the farm-implement manufacturers wished to increase their prices. It was the contention of the manufacturers that the increased cost of freight, labor, and raw materials had increased their costs about 10 per cent, and that they should be allowed to increase their selling prices to a commensurate degree.¹

The Federal Trade Commission, which was making a cost investigation in the implement industry, had not yet secured sufficient data to justify any action on the part of the Department of Agriculture, and it was not thought advisable to make any definite decision. The profits of the preceding year, however, had, in the opinion of the Department of Agriculture, been "well above the



Weighted index numbers of prices.—Fertilizers and "All commodities."—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

prewar average,"² and this, taken in consideration with the general conditions of the industry, led the authorities to believe that a rise

¹ In a letter of Oct. 22, 1918, from the farm-implements committee representing the industry to the Department of Agriculture, in which permission for the increase in price was asked, the following facts were emphasized:

1. The advance in freight rates over the preceding spring cost the industry approximately \$7,500,000.
2. Labor costs had increased from 20 to 40 per cent, or approximately \$15,000,000, thereby making a total increased cost of \$22,500,000, "which would be $7\frac{1}{2}$ per cent on \$300,000,000 sales volume."
3. Malleables and other items entering into the construction of farm implements had also gone up in price.

The committee asked the Department of Agriculture to rule "on the question of the average amount of advance in selling price" that would be sanctioned, and added that the general view of the industry appeared to be that conditions justified an average advance of approximately 10 per cent.

² The Department of Agriculture apparently doubted several of the contentions of the industry as is evidenced in the following extract from a letter on Oct. 28, 1918, in reply to the request that they be allowed to increase prices:

"It would be of great assistance if you could give the information upon which the extra cost of the industry of seven and a half million dollars as based for freight advances, so we could have some details for this huge figure. The same applies to labor advances. The figures 20 to 40 per cent seem to me too high, as I have seen no figures to justify such a rise all round."

of prices would be unjustified. And the price lists of early 1918 were continued through 1918 without any change.

(2) FERTILIZERS.

No attempt was made by the Department of Agriculture to exercise direct control over the prices of fertilizers, although the importers and manufacturers and distributors had been licensed under the presidential proclamation of February 25, 1918. The activities of the department, indeed, consisted mainly in helping the industry to secure cars and fuel during periods of stringency.

The price of fertilizers was, however, probably affected by the work of the department in distributing nitrate of soda to farmers throughout the country. In the year 1918, 75,000 short tons were sold at a price of \$75.50 per ton. The 1919 demands approximated 150,000 tons, the selling price of which averaged \$81.¹

¹The present tendency of fertilizer prices is shown in reports received by the Department of Agriculture which indicate that the fall of 1919 will witness a drop of about 30 per cent in the price of mixed fertilizers in various southern States.

II. THE BASIS FOR DETERMINING A FIXED PRICE.

The student who turns through the several chapters that have gone before, and seeks there a sharp analysis of the policies that lay at the bottom of each control, will be disappointed. The Congress or the President formulated no general rule of price fixing, upon which each control agency might put its finger, beyond their hope that prices would remain near enough the cost of production to yield only "reasonable profits." The various war-time agencies, therefore, each went its own way always with the approval of the President, and each set up its peculiar system of control.

The price-control boards generally were given cost data through the Federal Trade Commission, and this fact did give them a somewhat common approach in their bases for determining upon a fixed price. But not during the whole war were the boards in working agreement upon what should constitute the costs allowable for production, or the "reasonable profit" allowable above those costs once they had been determined. They were at equal loss in the beginning, once each had satisfied its own mind what to allow as a "reasonable profit," whether to grant that "reasonable profit" to each producer above his own individual cost of production, or make it applicable without scruples to low-cost and high-cost producers alike. The Food Administration generally chose the more flexible control, made possible by wide uses of profit margins for application by each individual. The price-fixing boards, strictly speaking, however, came to adopt a single rather than a variable price, fixed somewhere above the "bulk line" of production.

(1) THE OBJECTS OF THE PRICE FIXERS.

It is important to bear in mind at the outset that the immediate objects at stake with the various control boards were not always identical. The War Industries Board and price-fixing committee, for instance, gave emphasis to the stabilization of prices pertaining especially to Government purchases, while the Food Administration and Fuel Administration emphasized the protection of the public. The main object of all price-control boards at Washington, however, was to stimulate and maintain a maximum of production and it was to this problem they all gave attention in some manner.

The Food Administration and the Fuel Administration did not, of course, await the announced intention of the Government to purchase a particular commodity before adopting some form of control if public necessity required. There were in point of fact close

~~and direct relations between~~ Government orders and the regulations of ~~foods and fuels~~, through food supplies going to the Army and Navy and the supply of fuel for war manufactures. But the War Industries Board, and later the price-fixing committee, took as their main concern the prices of commodities which were needed in great quantity by the Government. The origin of every regulation by the price-fixing committee lay in the circumstance that the Government purchases were on a great scale and threatened to disturb market prices.¹ The main object of the price-fixing committee was the stimulation of production, and it was that factor rather than the desire for a low price alone which influenced them in determining upon various fixed prices. They did not, it should be emphasized, work always upon the theory that the highest price would assure an ultimate maximum production when wage or other problems complicated particular situations.² They strove to fix their maximum prices at points high enough to encourage production adequate to meet the war program, but no higher.

(2) THE METHODS OF CONTROL.

So many kinds of control affecting prices were exercised during the war that an arbitrary line can scarcely be drawn separating price from other controls. The method of this inquiry has been to count as affecting prices those controls exercised over requirements, clearances, allocations, conservation, and priorities, but to study them only in a general way. The main business of this study after all has been an analysis of the controls dealing directly and strictly with prices. These controls include the setting of minimum and maximum prices known commonly as "fixed" prices, the setting of maximum margins of profit, or the fixing of special prices for Government purchase solely. The latter prices pertaining to Government purchases might in another sense be classed under options or outright purchases, and involve a study of the commandeering and requisitioning orders. These kinds of price control were exercised by different boards in diverse ways, determined usually by the powers at their command.

The conspicuous instance of a minimum price set during the war was that made by the Congress on August 10, 1917, when it fixed a minimum price of \$2 per bushel for wheat. The whole body of regulations administered by various boards, with but three exceptions, were designed to hold prices down and might be called either "maximum prices" or "maximum margins of profit." There follows a word in explanation of the method by which each board chose one or the other of these kinds of control.

¹ Price-fixing as Seen by a Price-fixer, by F. W. Taussig, formerly of the price-fixing committee.

² Lieut. Col. Robert H. Montgomery, formerly of the price-fixing committee.

The War Industries Board, and the price-fixing committee after March 14, 1918, concerned themselves solely with setting pegs beyond which prices might not rise but below which the law of supply and demand theoretically was given free play. But in fact the paucity of real power given to the board and the committee made them bargain virtually with the trade until an agreement was reached. Their control might more properly, therefore, be called "agreed-upon maximum prices" between the Government and the industry.

The Food Administration, while sometimes virtually fixing prices by effective roundabout methods, did not in the main utilize the fixed-price method of control exercised by other boards and seemed almost to boast that it had no legal power to fix prices. Their attitude was the more significant, furthermore, because apparently it represented a real conversion to some definite policy of control. The point of departure was, it would seem, one of policy rather than power, since the Food Administration was granted more liberal powers to control prices by Congress than were the War Industries Board or the price-fixing committee. The Food Administration control was more nebulous than any other control at Washington, and from many angles more flexible as applied to widely used staples. It consisted in the setting of maximum margins of profit, determined generally upon the reasonable prewar profit announced in circular form, with the intention that each individual affected should apply the approved margins in his own business.

The Fuel Administration, with a firmer legal authority to do so than any other price-control organ at Washington, fixed prices in a stricter sense than any other board. The War Trade Board exercised its control over prices by its power to stipulate the conditions upon which import and export licenses would be granted. The Army and Navy, interested only in their own purchases, worked out schemes whereby Government prices were determined and enforced by their power of commandeering or requisitioning.

(3) THE DATA USED IN FIXING A PRICE.

The most useful data, which the war boards sought to have on hand before beginning the determination of a fixed price, were schedules of the costs of production. The Federal Trade Commission, with its hundreds of accountants busy over the country, supplied cost figures especially for the War Industries Board, the price-fixing committee, and the Fuel Administration.¹ The various interpreta-

¹ The Federal Trade Commission during the war made confidential cost studies upon the following: Bituminous coal; anthracite; coal, jobbing; coal, retailing; coal, docking; crude petroleum; fuel oil; kerosene; gasoline; lubricating oil; aviation gasoline; castor oil; iron ore; coke; charcoal; pig iron; ingots; blooms; slabs; billets; rails; shapes; plates; bars; sheet bars; sheets; rods; wire; tin plate; wire rope; steel rounds; forged billets; nickel and carbon steel bars; steel slugs; Davis wheels; cast-iron pipe; high-speed tool steel; steel castings; malleable-iron castings; ~~cast~~

tions put upon different cost data in the determination of the point above which to allow a "reasonable profit" are considered later.

In addition to material relating to costs of production there was made available to various control agencies at Washington through the price section of the War Industries Board a comprehensive set of quotations of commodities at wholesale. These prices were especially useful where cost data were not available and where it was desired to know how far above costs speculation in the market had carried prices. It was not possible, except where confidential reports were available or volunteered, to report contract prices, although in the case of several of the most important commodities dealt with the bulk of sales was made under contract. For a great many of the transactions current quotations were of little significance because of outstanding contracts. Old contract prices were of particular importance in the consideration of control over crude iron, steel, copper, and sulphuric acid.

(4) THE PROBLEM OF THE LOW-COST AND THE HIGH-COST PRODUCERS.

It was obvious from the outset that producers would not strive to turn out their maximum of production unless assured of a price high enough above their costs of production to yield them a reasonable profit. But as soon as an investigation into the cost of producing any commodity began, wide differences appeared between the costs incurred by the several producers. That problem remained throughout the war one of the most intricate of those confronting price-fixing boards.

and torpedoes; locomotives; locomotive cranes; farm machinery; farm machinery, retailing; sisal twine; automatic sprinklers; automatic sprinklers, installing; clinical thermometers; copper; nickel; lead; manganese ore; aluminum ore; aluminum ingots; aluminum products; zinc; zinc sheets; zinc plates; zinc concentrates, reducing; monel metal; quicksilver; brass and copper sheets; brass seamless tubes; brass rods; insulated copper wire; sand and gravel; crushed stone; riprap stone; asbestos fiber; asbestos products; cement; common brick; sand, lime, brick; fire brick; hollow building tile; gypsum wall board; gypsum plaster board; fiber wall board; yellow-pine timbers; yellow-pine lumber; spruce lumber; Douglas fir; hemlock lumber; mahogany lumber; logs; logging; locust treenails; windows and doors; birch logging; rosin; lumber, retailing; boxes and barrels; wood pulp; sulphite pulp; newsprint paper; book paper; envelopes; stationery; chip board; container board; acetone; acetate of lime; alcohol; sulphur; sulphuric acid; caustic soda; chloride of lime; soda ash; bicarbonate of soda; washing soda; liquid chlorine; calcium chloride; hydrochloric acid; glycerin; pintsch gas; cottonseed crushing; cotton ginning; cotton compressing; cotton lintens; cotton yarn; cotton duck; shelter tent duck; tape and webbing; sheetings; denims; gauze; towels; wool, wholesaling; woollens, wholesaling; rags, wholesaling; kersey lined breeches; sheepskins, importing; hides, wholesaling; sole leather; black harness leather; calf upper leather; kip upper leather; side upper leather; boots and shoes; boots and shoes, retailing; slaughtering; meat and by-products; lard rendering; lard substitutes; milk; grain, wholesaling; flour; flour, jobbing; bread; canned vegetables; canned fruits; canned meat; canned fish; canned milk; canned condiments; dried fruits; smoking tobacco; chewing tobacco; cigarettes; oil tanker transportation; towing; ship-building, accounting.

Less difficulty would have been encountered in finding a single unit cost of production for each commodity controlled, perhaps, had the whole of each commodity been produced by one company. It was relatively simple to represent the cost of producing a pound of nickel or of aluminum in this country because the output of each was virtually controlled by a single concern. But the cost of producing a ton of pig iron varied from \$18.14 to \$45.72 in September, 1918, according to figures collected by the Federal Trade Commission. The cost of producing a ton of beehive coke varied, in like manner with different producers, from \$2.93 to \$11.45. The cost of producing a ton of anthracite coal within the Pennsylvania district varied from \$2.64 per ton to \$7.06. An excellent example in the diversity of unit costs is brought out by the Federal Trade Commission report upon the costs of producing rosin, which show a variation in the per cent of margin on investment running for different companies from 10.7 per cent to 275.1 per cent.¹ The price-fixing committee gave considerable thought to this problem, and endeavored carefully to determine whether it would be better to fix upon a set margin of profit above cost and thus fix a different price for each producer, or select a point somewhere between and make that single fixed price applicable alike to the low-cost and high-cost producer.

There did not appear during the whole war a more intelligent inquiry into the problem provoked by a difference in cost between producers than that initiated by Mr. Robert S. Brookings as chairman of the price-fixing committee. Mr. Brookings, early in September

¹ Federal Trade Commission figures, covering first 10 or 11 months of 1918:

ROSIN

[Production margin, based on average sales value.] ^a

Company.	Barrels produced, 280. ^a	Sales value production (per barrel).	Cost of production and marketing expense (per barrel).	Margin (per barrel).	Investment (per barrel).	Per cent of margin on investment.
No. 1 ^b	5,991	\$10.69	\$10.087	\$0.603	\$3.445	17.2
No. 2 ^c	3,764	9.17	8.084	1.086	^d 10.723	10.7
No. 3 ^c	9,080	9.31	7.269	2.041	3.090	50.5
No. 4 ^b	12,743	10.83	8.549	2.281	7.775	29.5
No. 5 ^c	6,787	8.67	6.297	2.373	^d 12.870	18.1
No. 6 ^c	4,971	9.86	6.240	3.620	3.120	115.3
No. 7 ^c	5,025	10.23	6.181	4.049	^d 12.804	31.4
No. 8 ^b	9,636	10.91	5.727	5.183	2.198	235.8
No. 9 ^c	6,234	10.12	4.538	5.582	4.812	115.6
No. 10 ^b	17,387	11.31	5.183	6.127	4.125	148.4
No. 11 ^b	16,298	11.26	4.910	6.350	2.732	232.0
No. 12 ^b	10,475	10.62	3.922	6.698	2.434	275.1
Average.....		10.25	6.415	3.833	5.926	55.8

^a Companies range in order of margin per case, from low to high.

^b Eleven-month periods.

^c Ten-month periods.

^d Heavy investment due to output being less than the still's capacity.

of 1918, asked various leading economists familiar with the price problems at Washington, and the members of the price-fixing committee, to present memoranda upon the respective advantages of fixing a variable and a single price. These opinions, made by men peculiarly qualified by war-time experience to judge the practical as well as the theoretical aspects, are worthy of analysis. There follow the memoranda given by Dr. F. W. Taussig, member of the price-fixing committee and chairman of the United States Tariff Commission; Lieut. Col. Robert H. Montgomery, representative of the War Department upon the price-fixing committee; Mr. Wesley C. Mitchell, chief of the price section of the War Industries Board; Mr. William B. Colver, member of the price-fixing committee and chairman of the Federal Trade Commission; Mr. W. F. Gephart, of the United States Food Administration; Mr. H. M. Channing, chief of the legal section of the War Industries Board; and, finally, Mr. Robert S. Brookings, chairman of the price-fixing committee.

1. Dr. F. W. Taussig, chairman of the United States Tariff Commission and member of the price-fixing committee, wrote the following memorandum on the question of "Uniform or varying prices":

(1) If differences in cost of production between different producers were—
(a) Clearly ascertainable.

(b) Due solely to differences in the natural resources utilized by them, it would not be impracticable to purchase from them at prices based on their differing costs.

As a matter of fact, neither of these conditions is ever present. In the first place, costs are not clearly ascertainable. They vary from month to month, from year to year. We get figures from cost accountants which are worked out to the last cent, but which, as a matter of fact, contain arbitrary and debatable elements. Any endeavor to pay to each producer according to his costs would lead to perpetual wrangling, perpetual requests for changes and modifications. In the second place, differences in cost are by no means due solely to differences in natural resources. They arise very largely from differences in skill, energy, efficiency. To pay a low price to a producer who has brought down his costs through skill and ability is to penalize the most effective form of human effort.

(2) Sale at varying prices is in any case not practicable. If the Government fixes a price, it must be a price uniform for all producers. Were this not the case, there would be constant squabbling and intriguing for favored position.

(3) The main problem is that of purchase, and I am unable to see the practicability, as conditions of production stand to-day, of carrying out a policy of purchase at varying prices. The only possible way of carrying it out would be for the Government to take over all the establishments and try to run them. Quite apart from the constitutional questions involved (as regards the fair price which the Government must pay for each plant) the actual administration and running of an enormous variety of plants would be a hopeless task.

(4) The only feasible plan in price fixing is that of establishing a uniform price, which should ordinarily be paid for the whole of the output.

The uniform price which the Government thus must fix is not necessarily the cost of production price. It need not be either an average cost of production

price or a marginal or "bulk line" cost. The Government might be expected under ordinary conditions to pay the market price that would obtain in the absence of regulation, irrespective of cost. Under conditions of war stress and war exigency, however, the Government must pay for an essential commodity that price which will maintain and, if possible, stimulate the volume of production. Such a stimulating price is not far from the marginal or "bulk line" cost.

There will always be sporadic producers having very high costs, higher than the "bulk line," who may be disregarded. It is conceivable that in extreme need for a particular commodity the Government will make some special bargain with the small number of high-cost producers. But such transactions are extremely dubious and are to be avoided except in the extremest urgency. As regards them, it must be made out that the very high cost of the producers is not due to slackness or inefficiency on their part but to poor natural resources, and that the payment is indispensable for the maintenance of a supply absolutely needed.

2. Lieut. Col. R. H. Montgomery, representative of the War Department on the price-fixing committee, submitted the following memorandum on the "Fallacy of attempting to pay a different price for the same thing as applied to a basic commodity and an entire industry":

✓ (1) I strongly object to any arrangement which will result in paying one producer of a standard article or commodity a higher price than is paid to another producer of the same thing, for the following reasons:

Any plan which purports to limit the profit of each producer—

(a) Ignores the sound, economic, differential to which the low-cost efficient producer is entitled;

(b) It is in effect a return to, rather than a departure from, the cost-plus system. The War Department's present policy in this respect is to avoid cost-plus contracts whenever possible;

(c) Penalizes the low-cost producer by placing him on an equality (as to profits) with the high-cost producer. Such a penalty is in direct violation of existing intelligent business methods;

(d) Places a premium on the high-cost producer, who is the one to be penalized, and actually encourages a continuance of inefficient, extravagant, wasteful management;

(e) Purportedly gives the Government an opportunity to buy at a low price from the low-cost producer, without any guaranty, however, that the low-cost producers will continue to be low cost. With a penalty on low cost and a premium on high cost, is it not reasonable to predict that the low-cost man will inevitably increase his costs—fraudently or because he makes as much money on high costs as on low costs, and can pay as much as he likes for supplies, labor, etc.?

(f) Can not be effectively administered, because it is expected that the machinery of control will include a system of reports and inspection emanating from hundreds of producers, who have every interest to overstate their costs. The available supply of skilled accountants in this country is exhausted. The present demand from legitimate sources greatly exceeds the supply. My familiarity with this matter leads me to object to setting up a system of control which is not operatively possible;

(g) Presupposes that fair maximum prices can not be fixed. This is a familiar argument and is of academic interest only and can not control our

action, because every business man thinks that his problems are more complex than those obtaining to other businesses. As they can not all be right, the argument falls through of its own weight.

(2) I am strongly in favor of limiting the profits of all contractors who sell to the Government to a reasonable return on capital invested. Over a year ago the war committee of the American Institute of Accountants, of which I am a member, unanimously adopted a recommendation to this effect, but we could not secure its adoption. We are now forced to fix a price which will apply to the Government and public alike. When dealing with an entire industry the elements underlying public price fixing are not comparable with the ability of the Government to supervise individual contractors. I think the individual contractor can be regulated, although we have a big uncompleted job on our hands in this respect.

I do not think we can regulate the costs and methods of 100 per cent of any industry. I do not think that we can fix fair maximum prices on representative grades, etc., and regulate such prices.

The differences between regulating costs and processes (which are secret) and regulating prices (which are public) are, in my opinion, vital and controlling.

(3) As the War Department representative on the price-fixing committee, I expect to maintain the position that a policy of fixed profit per unit, without limitation on costs and extending to an entire industry, is unwise and contrary to the best interests of the Government and the industry affected alike. That a failure to encourage and reward the low-cost efficient producer would be a step backward which the War Department will not stand for, because without recognition he will cease to exist.

3. Wesley C. Mitchell, chief of the price section of the War Industries Board, submitted the following memorandum relative to "One Price for Each Commodity versus a Graded Scale of Prices."

DIVERSITY OF PRICES PREVAILING UNDER NORMAL PEACE-TIME CONDITIONS.

On any given day each of the great staples is sold at several or many different prices.

- (1) Varying grades, of course, command different prices.
- (2) So, too, do large lots and small lots of a given grade.
- (3) There are differentials between different markets.
- (4) Original producers, local buyers, manufacturers, commission houses, wholesalers, retail dealers, etc., in turn charge higher prices than they paid.
- (5) There is often a wide difference between current market quotations and contract prices.
- (6) Cash prices are usually lower than prices which involve waiting for payment.

(7) Even the same class of dealers selling the same grade of the same article in the same amounts in the same market on the same day do not all receive the same price. This last proposition is particularly important during a period of extraordinary changes, such as we had in 1916 and the first half of 1917.

These diversities are standardized rather than abolished by a single-price policy.

The adoption of a single-price policy does not mean the abolition of the above-listed differences. It usually means that all business men of a given class (for example, all copper miners or all shoe manufacturers) receive prices

that vary in standard ways from a single base price. Differentials for grades, markets, time of payment, size of purchases, etc., may be more or less standardized, but they are not eliminated. Further, the base prices are usually merely maxima, and anyone can charge less if he chooses.

Aside from the fact that the base price is fixed by Government instead of by contract, the chief changes from peace-time conditions are probably that—

(1) Day to day fluctuations are reduced, if not eliminated;

(2) There is less difference between the bargains struck in a given market on a given day; and

(3) Current market quotations and contract prices (under new contracts at least) keep closer together.

A graded scale of prices would be more of a departure from peace-time conditions than a single-price policy. For it would mean giving to different producers prices which vary by margins, not based on differences recognized in ordinary business, but on some other ground, particularly differences of cost. In ordinary business, the fact that a man produces at higher cost than another does not enable him to get a higher price. The crux of the practical problem is whether public policy requires the price-fixing committee to introduce into the business system a revolutionary change by making differences of cost a reason for corresponding differences of prices.

Circumstances which may justify prices graded according to costs.—In some cases it may be necessary to stimulate production to the utmost and to restrict ordinary civilian consumption. The most effective means to that end is a single base price so high that all productive capacity will be used, and so high that economy must be practiced in consumption. Of course, that plan gives low-cost producers extraordinary profits—an objection that is only partially met by the excess-profits tax, since this tax always leaves part of the extraordinary gains to the fortunate enterprise.

In other cases, it may be necessary to stimulate production, but not to repress civilian consumption. Indeed, one chief aim of regulation may be to keep down costs to the consumer. The high single price would accomplish the first end but obstruct the second. A graded scale of prices, however, might be arranged to call out the bulk of the low-cost production at a moderate rate, and also to get a certain amount of high-cost production at a different figure. But how can consumers get the benefit of the moderate price, and at the same time let the high-cost producers have a remunerative market? I see no way except to arrange a Government-buying monopoly, that would take over the whole product, at different prices, then average the costs, and sell at a figure which would just cover the outlay plus administrative expenses. Such a course may be feasible in the case of a few great staples, like sugar, but it is scarcely feasible as a general policy applicable to commodities at large.

Effect of the two systems upon efficiency.—A graded scale of prices, if carried out in full detail, is practically a "cost-plus" system of Government purchases. That system has been tried out and displaced because it gives an incentive to wasteful and inefficient management.

The single-price policy, on the contrary, is like the ordinary competitive-price system in stimulating efficiency, at least in those cases where the price-fixing committee is not compelled to set their price very high. A moderate price will often enable three-quarters or more of the product to be turned out at profits, ranging from the liberal to the moderate, put perhaps 10 per cent more of the producers on their mettle to break even, and put the remaining 15 per cent of least efficient producers out of business—to the advantage of the community.

Conclusion.—(1) A single-price policy, allowing differentials for quality, transportation, size of transaction, terms, credit, and margins between manufacturers, wholesalers, and retailers makes less of a departure from normal business conditions than a graded scale of prices based on differences of cost would make.

(2) The latter policy, however, may be desirable in the case of a few prime requisites where there is the double need of stimulating production to the utmost and keeping down cost to the consumer. To achieve both these results, however, is scarcely possible without setting up a Government monopoly for buying the total output and distributing it at a uniform price.

(3) In the great majority of cases, the single-price policy is to be preferred, because of its simplicity—a great point in view of the administrative perplexities which the price-fixing committee confronts.

(4) Finally, the single-price system is more favorable to industrial efficiency than the graded price system—at least, when the price taken is not very high in the scale of costs. Excess profits taxes will turn part of the large gains of low-cost producers into the Public Treasury.

Summary.—(1) A single-price policy allowing differentials for quality, transportation, size of transaction, terms of credit, and margins between the manufacturer, wholesaler, and retailer makes less change from normal business conditions than a graded scale of prices based on differences of cost would make.

(2) A scale of prices graded according to costs, however, may be preferable in the case of a few prime requisites, when it is necessary both to stimulate production to the utmost and to keep down costs to the consumer.

To achieve both of these ends, however, it seems necessary to supplement price fixing by creating a government buying monopoly to take over the entire output, average the costs, and distribute the goods at a uniform price.

(3) The single-price policy requires no such elaborate machinery and is therefore far simpler to administer, to explain, and to defend.

(4) Excess profits taxes partially remove the objection that the single-price policy gives government favors to the low-cost producers. On the other hand, the graded scale of prices carried out to its logical conclusion is practically equivalent to the “cost-plus” system, which has been abandoned on government contracts because it offers an incentive to wasteful and inefficient management.

4. Mr. William B. Colver, chairman of the Federal Trade Commission and member of the price-fixing committee, wrote the following memorandum on the question of “A single price as opposed to a pooling with varying prices”:

I beg to submit for your consideration some observations as to price fixing and the theory of the single price as opposed to a pooling with various prices.

It would seem that price fixing has two and only two purposes—

(1) To insure adequate production; and

(2) To guard against a price structure which shall be so high as to be unhealthy.

In applying the single-price theory, it is held to be necessary, in order to insure the required production, to fix a price high enough to make profitable the operation of marginal, high-cost producers. It follows that in meeting the first requirement, namely, the insurance of adequate production, we defeat the second purpose, namely, the avoidance of an unduly high price structure.

I raise the question now whether or not, in the light of experience, the single-price theory, as put into practice, has been successful.

Some difficulties that have followed this practice may be enumerated as follows:

First. A maximum price becomes a minimum price, and few will voluntarily sell under the maximum price even though low-cost producers might well afford to do so. Not only has this practice been approved but it has been aided and abetted by a declaration that the Government itself will not accept voluntary offers of commodities at prices lower than fixed prices. This would seem to be a complete inversion of the second purpose of price fixing.

Second. The single price, lest it shut off the needed production, must be high enough to give profit to the highest cost producer that it is desired to continue in business.

Third. The consequent price is far above the price indicated by the average cost of production.

Fourth. The cost of living and the cost of secondary manufacture is made unnecessarily high and the mounting prices become a vicious circle constantly spiraling upward.

Fifth. Such single price, while producing excessive profits for low-cost concerns, does not necessarily stimulate production but actually acts as a check on production. (This will be attempted to be shown in detail hereafter.)

Sixth. The single price tends, in the case of low-cost producers, to encourage wastefulness and extravagance and to check rather than to stimulate production.

It is held that high prices stimulate production and are purged by the application of drastic excess-profit taxes. Let us examine this.

Assuming that higher prices do stimulate production (though under the circumstances here under consideration this does not seem beyond dispute), increased production, under ordinary circumstances, invariably makes for lower cost and hence, under fixed price, to greater profit. The higher the prices the sooner the excess-profit point is arrived at, and as production continues the more rapidly the successive stages of surtax are arrived at. The higher the tax the lower the net profit becomes, and the inducement is not only not to increase production but rather to curtail it in order to avoid getting into the class of maximum tax. To illustrate this we might take a single basic commodity—for example, coal—and any rule that would apply to coal would apply equally to iron ore and lumber, and other basic commodities and their products.

Taking the case of coal, suppose a given mine produces a million tons of coal per year in normal or peace times, and earned an average of 10 cents per ton net profit. Its net profit per million tons of coal would then be \$100,000.

Suppose in war times, under regulation, and with excess-profit tax operating, this mine produced its million tons, was allowed 20 per cent net operating profit, and by so doing arrived at 30 per cent excess-profit tax rate. It would then earn \$200,000 net operating profit, pay \$60,000 excess-profit tax, and keep \$140,000 as divisible profit.

Suppose the production of this mine were doubled and the resulting profit (capital investment remaining the same) caused it to go to an 80 per cent excess-profit tax rate. It would earn on the second million tons (the stimulated production) a gross profit of \$200,000, on which its excess-profit tax would be \$160,000, and the divisible profit (the only real profit) remaining would be but \$40,000. Clearly, in the absence of any other consideration, the mine would earn \$40,000, leaving the second million tons of coal in the ground until the return of peace, when it could be mined at the peace-time rate of profit (10 cents) with the resulting divisible profit of \$100,000.

I dissent wholly and entirely from the theory that excess-profit taxes justify unreasonable price structures and purge unreasonable profits. Not a penny of excess-profit tax has been or will be paid to the Government that has not first been collected with many other pennies from the people of the country, either as consumers or as taxpayers. Since the Government itself is by far the largest of all buyers at fixed prices, it seems to be absurd to take an excess dollar out of the Treasury in order to get 34 cents of it back by way of excess-profit taxes. The net result of such a transaction is merely creating the necessity of raising an otherwise unnecessary 66 cents by some other means of taxation or by bond sale. In the main, it is not industry which ultimately pays excess-profit taxes, but the consumer, and only a small part of the excess which the consumer pays reaches the Treasury in the form of taxes. The whole excess-profit tax theory is an attempt to lift oneself by his bootstraps, and there is lost from 20 to 80 per cent of the energy employed in the process.

A referendum taken by the National Chamber of Commerce was practically unanimous in favor of taking no excess profit during the war. Taking this as a representative judgment of the business world, it would seem that the perplexing problem of dealing with excess profits would be solved by having no excess profits with which to deal.

To take the referendum of the National Chamber of Commerce at its face value and apply it would probably draw forth some hoarse cries. As a group, men are patriotic; as individuals, they will pay as small a tax as can be calculated and will secure as high prices and as great profits as can be extracted. High excess-profit taxes themselves have a bad effect on business men. They nourish a feeling that the Government is wasteful, and, as a result, tax evasions do not carry any particular feeling of guilt. When tax evasion takes the form of padded and increased costs, of lavish expenditures made for the sole purpose of reducing the rate of profit, the result must be detrimental to the maximum production at maximum efficiency. The business organization is softened by bad practice and by unbusinesslike methods, and while it holds to such unhealthy practices it can not maintain the highest degree of efficiency.

The purchasing power of our money and credit as well as that of our allies would be restored by a lowered price structure; tax dollars would each buy more nearly a hundred cents' worth of goods; the Government would need to collect fewer dollars in taxes and sell fewer bonds; and the public, relieved of profiteering (I do not use the word "profiteering" invidiously, at this time), would be able to produce the required tax money and bond money since their buying power, which is not absorbed by the mere expense of keeping alive, would be left free in large proportion to be dedicated to the service of the Nation. If the inflated price structure were brought back to an approximation of normal, and if 100-cent dollars were substituted for the 40-cent dollars we are now using, many of the problems which perplex and much of the rising discontent would be disposed of. The single-price fixed so high as to make profitable the high-cost marginal producer has, as I have said, a vicious effect on business itself. The reflex shows itself in tax evasions and, worst of all, in inviting and encouraging wasteful and extravagant business operations.

When a business reaches the point that its excess-profit tax will operate to take away a considerable part of its earnings, it inevitably is tempted (and in many cases the temptation has proven irresistible) to spend extraordinary sums in unnecessary expenditures. These take the form of advertising looking to the building up of present or future good will, or repairs and betterments not presently needed or made with an eye to the future and in anticipation of a return to peace-time basis. Further, expenditures are lavishly made by big con-

cerns out of rapidly accumulating surpluses which are in the nature of strategic advances upon other weaker competitors and which, upon a return to peacetime basis, will tend to result in a permanent elimination of weaker competitors and the rapid extension of monopolistic conditions. These expenditures are made on the theory that out of every dollar so spent, the Government itself contributes anywhere from 20 to 80 cents of the cost.

The whole purpose of price fixing and of tax legislation is not to raise revenue but to win the war. That is the single aim of all these activities. Any device which interferes with that aim is conceived in error.

Having gotten this rather long preamble behind us, let us now consider what may be done with respect to iron and steel.

In the first place, the Steel Corporation, through its control of a large part of the railroad transportation at the head of the Lakes, was able to levy a toll on the bulk of the iron ore produced in the country. Just as in the case of anthracite coal, in which a plan was worked out where the profit in anthracite coal lay in many cases not in mining it but in its transportation to market, so in the case of iron ore, the mining of the ore itself was often relatively unprofitable while the transportation of the ore by rail was made to yield enormous profit. The anthracite railroads owned a great many of the anthracite mines; they often mined practically at a loss, transporting the coal at an enormous profit, and competitors were compelled to mine at the lowest possible margin and all the natural profits were absorbed by the transportation companies as freight.

The railroads of the country, aside from the Government itself, are the greatest consumers of iron and steel products. The Railroad Administration now has in its control the ore-carrying roads of the Northwest. If the iron ore were carried to market at a price which would represent just about the cost of the service, the resulting total railroad revenue for the whole country would show a very slight decrease, but if this loss in freight revenue and consequent saving in cost of ore at furnace were carried on through the iron and steel price structure, the railroads would undoubtedly get back several times over, by reason of lowered cost of materials, such shrinkage in freight earnings.

This would apply also, perhaps, to a readjustment of freight rates with respect to coke, and possibly for coal also, at least in certain cases, for example, such rates as apply to Bethlehem on ore, coal, and coke. Bethlehem might be made a fairly low-cost production, instead of which Bethlehem now puts the entire steel industry out of harmony and is the chief disturbing factor in our problem. Rather than permit Bethlehem to upset the whole steel industry, it might well be operated on Government account and so be removed from the equation.

As we see the enormous spreads in the various production costs of pig iron, and as we see these spreads grow as the fabrication of the material is carried forward, it seems apparent that if some device could be found whereby operations could be started at one or more points from a level, the problem would be simplified.

The main objection to a variety of buying prices and a composite selling price is that it penalizes efficiency and bonuses inefficiency. But the excess profit tax does this very thing, frankly and unashamedly. That is what the excess profit tax, taken together with high prices, is—penalty for efficiency and by contrast a subsidy for inefficiency.

Suppose we were seeking for a real stabilization; let us take iron and steel as our example. If at vital points equitable levels could be arrived at, we could have a fair basis from which, particularly in an effort to stimulate production, to keep prices relatively normal, to directly reward efficiency and by contrast to penalize inefficiency.

Suppose in iron and steel all the iron ore were taken over by the Government at varying prices to be determined by adding to a reasonable cost of production a just and reasonable profit. The iron ore from the various ore-producing fields purchased at varying prices would be pooled and result in a composite price for each consuming field, so that, so far as the ore price is concerned, all furnaces would start on an equality. There would remain the differential of transportation, and absolute equality could be secured by delivering ore to the various furnaces at a uniform price which would include transportation. In other words, pool not only the ore price but the transportation charge. Now we would have all furnaces in a given field starting on an equality as to their ore.

Similarly let the Government buy all the coke at varying prices and distribute it at a composite price which would absorb freight differentials.

Now we come to the calculation of the profit per ton. There should be an agreed upon per-ton profit, but this should be used only as a basis, because, as we shall see, equity would require certain differentials not difficult to calculate.

First: Equity as between producers requires consideration of the amount of the investment and of its character. For instance, it is often found that a low-furnace cost has only been obtained by the expense of a high investment per ton of output, while frequently a high-furnace cost may be coupled with a low investment. It is obvious that the application of a uniform unit profit without reasonable consideration and scrutiny of investment will be inequitable.

This calculation of unit profit based on investment would also run with respect to the ore mines and coke ovens, and the same theory might well be carried on through the more advanced stages of the fabrication. Data sufficient for giving consideration to varying per-ton investments are not so difficult to arrive at as would appear. Book costs of investment less depreciation is presumably shown in more or less satisfactory form on the books of practically every company. Most of them also have the revaluation as of 1913 permitted under the internal revenue law. These give bases of comparison between companies and reveal the cases of high investment per unit of output, so that such cases may be easily isolated and intensively studied. Before going into a discussion of the mechanism of a pooling device, I wish to suggest some devices for encouraging volume and economy of production. These may be set down as follows:

After determining a tentative cost price by considering monthly production costs and adding a unit profit as modified by the legitimate unit investment and then adding a small charge to take care of the operation of the pool:

First. Make a further profit addition based upon a showing of decreased operating costs. For example, if cost is reduced a dollar per unit, allow 50 cents to go to additional profit and 50 cents to lowering price.

Second. Similarly penalize unwarranted increases in cost by deducting them from allowed profit. The deduction could be continued to a point of extinguishing the profit if the production can be dispensed with or can not be secured by transfer of labor, material, and cars to lower-cost operations.

Third. Allow an increase in profit as a return for supernormal production; allowance to be generous but apply only to the tonnage that is above normal production.

Fourth. Allow a substantial wage bonus to labor in return for continuous working.

The fourth point would best be elaborated a bit. Suppose a laborer received 50 cents an hour; after he had worked 15 consecutive working days,

set his wages at 55 cents per hour for so long thereafter as he continues to work without interruption. Voluntary loss of time would return him to the 50-cent wage, where he would remain until he had again worked 15 consecutive days. Holiday work might well be counted as double time (as two days for each holiday) in earning a place in the bonus class. In case of involuntary idleness, forced by lack of material, car shortage, accident, or any other cause beyond the workman's control, such idle days should not be held to demote him from the bonus class.

Now for the pooling plan:

The pool organization would make use of all existing agencies of production and distribution. There need be no resulting dislocation of trade.

Transactions would be exactly as now; orders taking the same course except when, as now, through priority orders or for ton-mile or other transportation or economic reasons, the pool manager might otherwise direct. The ore or the coke or the pig iron would be billed out in the name of the Government pool, to the immediate purchaser at the pool price, and at the same moment the mine or oven or furnace would bill the Government pool for the same quantity and quality at the price fixed for that particular mine, oven, or furnace. The pool would settle monthly with each mine, oven, or furnace for all material shipped. There would be added to the price paid the producer such small margin as would care for the expenses and hazard of the pool. A surprisingly small initial working capital would be required and it would be in the nature of a revolving fund, augmented by any net profits which might accrue to the pool as time passed. The pool (the Government) would have ownership of the material only for the instant of time when the title passed from the producer through the pool to the immediate purchaser, but that instant of ownership would be absolute ownership.

I am saying that the single-price theory has failed in practice. We have seen unduly high prices raised and raised again on the representation of fear of future increase in costs, and, as industries are interrelated and buy and sell from and to each other, and as we raise one because it anticipates an increase in cost, and raise others on the same anticipation, these raises, reacting, tend to justify the darkest fears. In other words, business concerns are busy skinning each other and the public and the Government is paying for the hide that is removed. With respect to iron and steel, all these considerations seem to argue that a number of changes in policy might well be adopted at this time.

First. Reduce the rail freight rate on iron ore to a figure which would represent the cost of the service and a fair average transportation profit; also control lake freight rates.

Second. Have the Government buy all iron ore and distribute it to economically efficient furnaces at a composite price which shall likewise absorb transportation charges.

Third. Treat coke the same as iron ore by pooling it and distributing it at a uniform price, absorbing transportation charges.

Fourth. Buy all pig iron through the Government pool and distribute it at a uniform price, absorbing freight differentials.

Fifth. From this point seek to establish no other composite price through pooling except in such cases as where the Government buys practically the total output, as in the case of rails, ship material, munitions, etc. In such cases apply the pooling system and distribute the surplus to the public at a composite price.

Sixth. Secure stimulated production by generously increasing the profit on all tonnage produced above the normal production as shown by recent experience, and similarly reward efficiency and lowering of costs, as set forth above.

Looking forward to the post-war contest for world markets, a present and determined effort to return to normal would seem to be prudent.

5. Mr. W. F. Gephart, Federal food administrator in Missouri, wrote the following memorandum on the "Governmental Policy of Fixing One versus Several Prices on a Single Commodity:"

It is assumed in the statement which follows: First, that there are several competitors producing the commodity with different costs of production; second, that in the system of taxation there is an excess profits tax or income tax of a character which will enable the Government, if it so desires, to reduce the larger profits of those producers who are able to produce well under the single-fixed price. The following reasons may be urged in favor of a single-fixed price:

1. It is in harmony with the present organization of industry, one of whose chief characteristics is competition. This is true because the primary justifications of the competitive system is that a premium is placed on most efficient production. The inefficient man is, in time, compelled because of his high costs to go out of business in favor of the more efficient, and the public secures the benefit of low-cost production. Yet, under a single-price system, the price must necessarily be fixed at the particular time, at or near the cost of production of that producer who has the highest costs, because his production is necessary in order to secure the desired supply or quantity. At the same time, the more efficient producers are encouraged by their liberal margins of profit to increase their output. There is thus an opportunity for the Government to do one of two things, or to do, in part, both of two things: First, the Government may take all or a large part of whatever is excess profit; or it may, when the production capacity of the more efficient plants has increased, readjust its one fixed price on a lower level, thus securing for society the advantage of a lower price and maintaining all the beneficial efforts of a normal competitive condition.

It may be urged that the more efficient producers under the above conditions will not increase their output and thus make possible the elimination of the less efficient, but such a result does not occur in actual business. It may also be urged that the less efficient should not be put out of business, but this is what actually occurs in normal times, and in addition, by the intervention of the Government in stabilizing the price on the basis of this less efficient producer, the Government protects him for a period, thus giving him every opportunity to improve his business and reduce costs. In addition, there is under the present industrial organization and legal system no vested right of any producer to remain in business, especially if he can not render society a service in fair costs of production.

2. The single-price system is much less complex and more easily administered. It is a very difficult and often an impossible task to determine production costs for the many different producers of a commodity. No two costs would be the same, and in an industry where there are many different producers, it would take many months to arrive at approximate costs. Then again changes in costs, which at the present time are marked, would require frequent and complete readjustment of the price schedules for the different producers. Again, the multiple or several-price system would result in a static condition in the industry. Every one would continue as a producer, whether or not his costs would entitle him to remain.

3. A multiple or several-price policy might have inequitable results on war taxation. This is true because these various prices would be fixed so that no

excess margin of profit would be left to the producers. That is to say, the Public Treasury would receive little or no tax from this particular source to be expended in whatever form of public expenditure it desired; the consumers of this particular commodity, under a varying-price system might escape their just share of taxes. Under a single-price system the higher prices which they may pay for the product goes in larger part into the Public Treasury in the form of taxes.

4. Under a several-price system large opportunity is given for comparisons which is likely to embarrass the Government. One producer thinks another is allowed an unfair margin. Another complains that his costs are increasing and desires a larger margin. No one of the producers has any great inducement to reduce costs under the static conditions of several prices.

5. Whether or not the numerous prices would be constitutional is primarily a question for the courts, but in any event there is in such a policy a large element of inequality. It is taking as a permanent measuring unit for the industry the least efficient and penalizing the more efficient. However important it is in these war times to stabilize certain prices for certain essential products this should not be undertaken at the expense of stabilizing industrial organization. No policy of price fixing can be successful except as it is established for short periods. Adjustments must be made and therefore a multiple-price system makes such adjustments much more difficult, even assuming that the the original system be successfully established.

6. On the basis of my experience as a Food Administrator in fixing food prices through the interpretation of fair prices, it seems fairly clear that any system of fixed prices must be simple and most easily administered if it is to have a large measure of success; second, that spreads in prices or different prices always tend in their actual workings to encourage the perpetuation of high prices. In our work we quote only one price on each commodity of the same grade.

6. Mr. H. M. Channing, chief of the legal section of the War Industries Board, wrote the following memorandum on "General Price Fixation on Cost Basis:"

We have been asked for an expression of opinion on the following problem. In determining a general price for certain staple commodities such, for example, as copper or steel, it is apt to appear that there is quite a wide range between the costs of the principal producers. It may, nevertheless, be essential to maintain the production of the higher-cost concerns, and also at the same time may be thought desirable to avoid paying inordinately large profits to the low-cost members of the industry. It has been suggested, and the idea strongly attracts many people, that prices for certain products be determined upon the basis of individual cost, allowing substantially the same profits to all whose production is requisite.

BY AGREEMENT.

The price-fixing committee operates either by means of agreement or in an advisory capacity to the purchasing departments. The committee can, with considerable freedom, enter into agreement with producers to adopt any basis of price fixation which may be acquiesced in by substantially all of them. It is not perfectly clear that the low-cost producer who has refused to agree to sell his product at cost plus a fixed profit could not make a fairly plausible claim that an arrangement of this character, entered into between the other producers and the price-fixing committee (acting in concert with intending purchasers), would constitute an unreasonable restraint of trade. We incline,

however, to the opinion that such an arrangement would be upheld by the courts as a reasonable restraint.

Failing agreement the Government would, of necessity, resort to its affirmative powers. These powers would be (a) to requisition existing goods; (b) to commandeer future production; (c) to take over and operate the plants themselves.

(A) REQUISITION OF EXISTING GOODS.

We have in a previous memorandum to you expressed the opinion that the measure of just compensation for existing property requisitioned would be the fair market value of such property, subject to certain qualifications which we believe would exist in the absence of a fair market. It would follow that the individual cost plus a profit probably would not be the measure adopted by the courts to determine compensation for such property.

(B) COMPULSORY ORDERS FOR FUTURE PRODUCTION.

With relation to compulsory orders for production of ordinary staple commodities, such as copper or standard steel plates, as we construe the statutes, there is contemplated a taking of the finished commodity rather than an order for involuntary performance of service (national defense act of June 3, 1916, sec. 120; naval appropriation act of July 1, 1918, p. 18. The language used in the statutes, and the clearer constitutionality which would result from the first construction, tend to bring us to our conclusions, although there might be commandeer orders issued which would approach very closely orders for the performance of services. Under our views compulsory orders require the delivery of a finished product, and the measure of just compensation would be substantially the same as for existing property requisitioned—the fair value of the product.

We should qualify this statement by the opinion, earlier expressed to your committee, that the highest cost producer could not be compelled to work at an absolute loss. The burden would probably rest upon him to establish that what would be fair value and just compensation for the rest of the industry would not be just compensation to him. In time of shortage it may be necessary to compel many such producers to operate and to pay them in excess of the actual value of their product.

Of course, some differentials based on local conditions might properly be made. Market values in one part of the country often vary from those in other parts of the country, and the same considerations which affect market values might properly be taken into account in the determination of just compensation or in price fixation.

Although a good deal of argument can be made on the other side of the question, we are unable to advise the price-fixing committee that under compulsory orders, dissatisfied producers would not be able ultimately to recover through the courts compensation based upon fair market value or its equivalent.

(C) TAKING OVER PLANTS.

Under certain conditions the Government has the power to take over plants. Where the Government does take over and operate a plant the compensation is not based at all either upon market value of the product or upon the cost of production, but is established as just compensation for use of the plant, which, in turn, is arrived at through the medium of market value of plant appurtenances.

CONCLUSIONS.

In conclusion we would say that although in some industries it might be possible to obtain the required volume of production upon a cost basis without creating litigation, it appears to us, from a legal standpoint, highly desirable to avoid the difficulties which are apt to attend the cost basis of price determination, and to adhere, so far as practicable, to the flat-price basis.

7. Mr. Robert S. Brookings, chairman of the price-fixing committee, wrote the following memorandum on the question of fixing "One Price or Several Prices:"

Referring to the discussion of one price or several prices and to avoid losing ourselves in a maze of abstract argument, suppose we simply investigate the steel situation to-day with the view of ascertaining whether or not any change in price or method is necessary or desirable.

First. Have we any evidence under the present one-price system of any failure in efficiency?

I have never heard of any. On the contrary, the steel producers seem to have shown remarkable efficiency, and we hear only of shortage in coking coal, transportation, and blast furnace capacity, which the steel companies seem to be making every possible effort to improve.

Second. Are the prices of steel, as fixed at present, abnormally high, as reflected in the profits of the lowest-cost producer?

Careful computation would indicate that, at present market prices, the Steel Corporation will receive this year gross profits of about \$420,000,000, of which the new excess profits and income taxes will absorb \$247,500,000, leaving \$172,500,000 or about nine per cent, on their investment of \$1,887,000,000. Of this sum, the Steel Corporation say they should set aside \$36,000,000, or 2 per cent on their investment to take care of depreciation and replacement which the Federal Government will not permit them to deduct in figuring their excess profits taxes.

While the Steel Corporation's costs are lower than those of the six or seven other companies which with it produce over 80 per cent of the steel, a careful comparison of the net results of their year's business indicates that they all show as large a return on their investment as the Steel Corporation, which is, of course, accounted for by the ratio of their production to capital.

It is also shown that the so-called number three or small companies specialize largely in steel refinements and that their return on investment, as reported to us last year, was larger than the Steel Corporation's.

We, therefore, find all steel companies practically on the same footing. It is then simply a question of whether or not the net returns on investment of 8 or 10 per cent in the steel industry are unreasonable as compared with other investment securities, taking into consideration the risks of manufacturing.

Third. Conceding as an abstract argument, however, that prices should not be made with any regard to the securing of excess profits taxes, and that the economic national health is best preserved by a low range of prices, inasmuch as the Government has formulated its revenue program for this year based upon large receipts from excess profits, would it be wise at the present time to propose any system of price fixing which would wipe out all excess profits? Or, in other words, even if the steel manufacturers were willing to practically reduce the price of steel so as to wipe out the excess profits—which I am sure they are not—should we encourage such a proposition?

Referring to the detailed cost sheets presented by the Federal Trade Commission, I would briefly call attention to the following points:

They have not yet finished their report on cost of ore, which they expect to have ready in a day or two. Their costs of coke, both beehive and by-product, for the month of June, as compared with the month of April (which we used at our May meeting) show practically no change.

Referring to the pig-iron reports for the same months, the costs would also appear to be about the same. A study of the figures submitted to you will show that, as a matter of fact, the steel companies producing four-fifths of the entire steel product produce their own coke and pig iron, and have consequently little or no interest in the prices we may fix on raw material or semi-finished products.

This reduces the interest in these items practically to the merchant pig-iron companies. You will notice from the report of these companies that they produce only about 200,000 tons of basic pig per month (and practically no Bessemer), which basic pig must necessarily go to the so-called No. 3 or smaller companies, which produce such refinements as to make the question of a dollar or two per ton on pig a not very vital matter.

The balance of the merchants' companies' production (say 300,000 tons per month) is foundry pig, which finds its market in products over which we have exercised little or no control in prices.

It would seem therefore that our entire steel price-fixing problem is reduced to a question of whether or not there are any differentials in cost which the present range of prices makes burdensome to any important producers; and I have failed to find any evidence of this, except in the case of the Bethlehem Co.; and we have no means of knowing whether, in the last analysis, it is burdensome to them until the Federal Trade Commission makes a special report on their costs and their Government contracts for shipbuilding and ordnance, with a view to ascertaining the facts. Notwithstanding Bethlehem's high costs, they seem to have made good profits last year, and I am told they are doing very well at the present time.

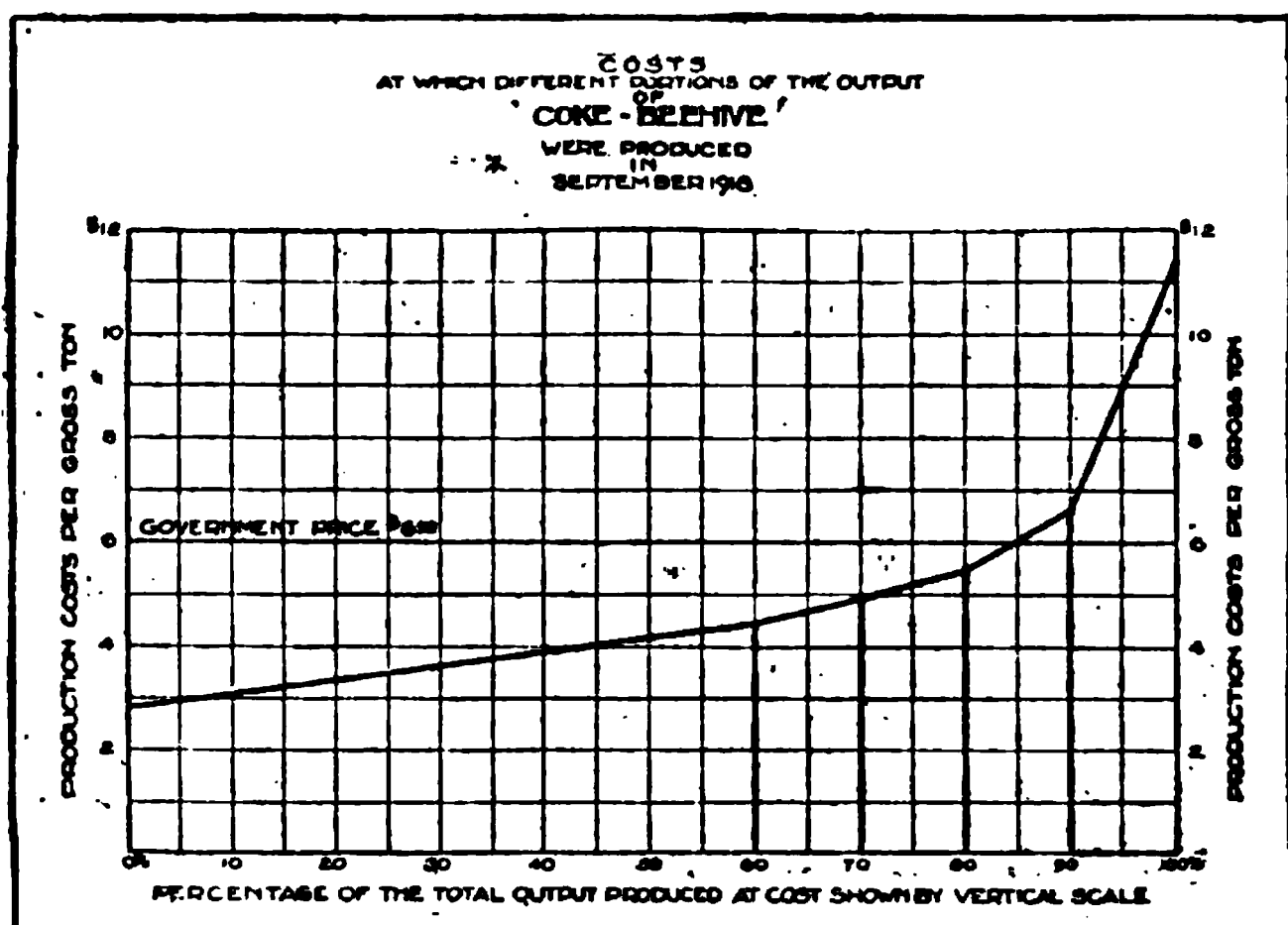
P. S.—It is quite probable that a few small merchant producers of basic pig and a larger proportion of producers of foundry pig will show that August costs will leave them no profit at present prices. So that we may have to consider an advance in pig iron, which would not affect steel prices, or else require the big integrated companies to absorb this production at a price which will maintain production.

(5) PRICES FIXED ABOVE THE "BULK LINE" OF PRODUCTION. ✓

The theoretical arguments urged before the price-fixing committee in favor of allowing each producer a set margin of profit above his individual cost of production soon gave way to the practical difficulties involved. The committee came to believe that any theory of determining fixed prices, akin to the cost-plus rule, made for encouragement to the less efficient high-cost producers. There seemed no disposition to countenance a practice that would give the high-cost producer precisely the same war-time guarantee that accrued to the low-cost producer, since there was not at hand the enormous administrative machinery necessary to enforce a variable price. The

price-fixing committee and the Fuel Administration thereupon determined to throw overboard the niceties of the variable price, and to fix a flat price somewhere above the "bulk line" of production.

The term "bulk line" of production, as it came into use during the war, meant the indispensable amount of any commodity that the war program required should be produced, and the "bulk line" of cost meant the unit cost to produce the last unit lot of that requirement by the marginal producer. It was the cost of production at the hands of this marginal or bulk line person usually which formed the basis for the price fixed. An arrangement of the costs of Beehive coke, for example, shows that there was a gradual shading in the cost of production, from \$2.93 per ton by the lowest-cost producers to \$11.45 per ton by the highest-cost producers. But it was found that these

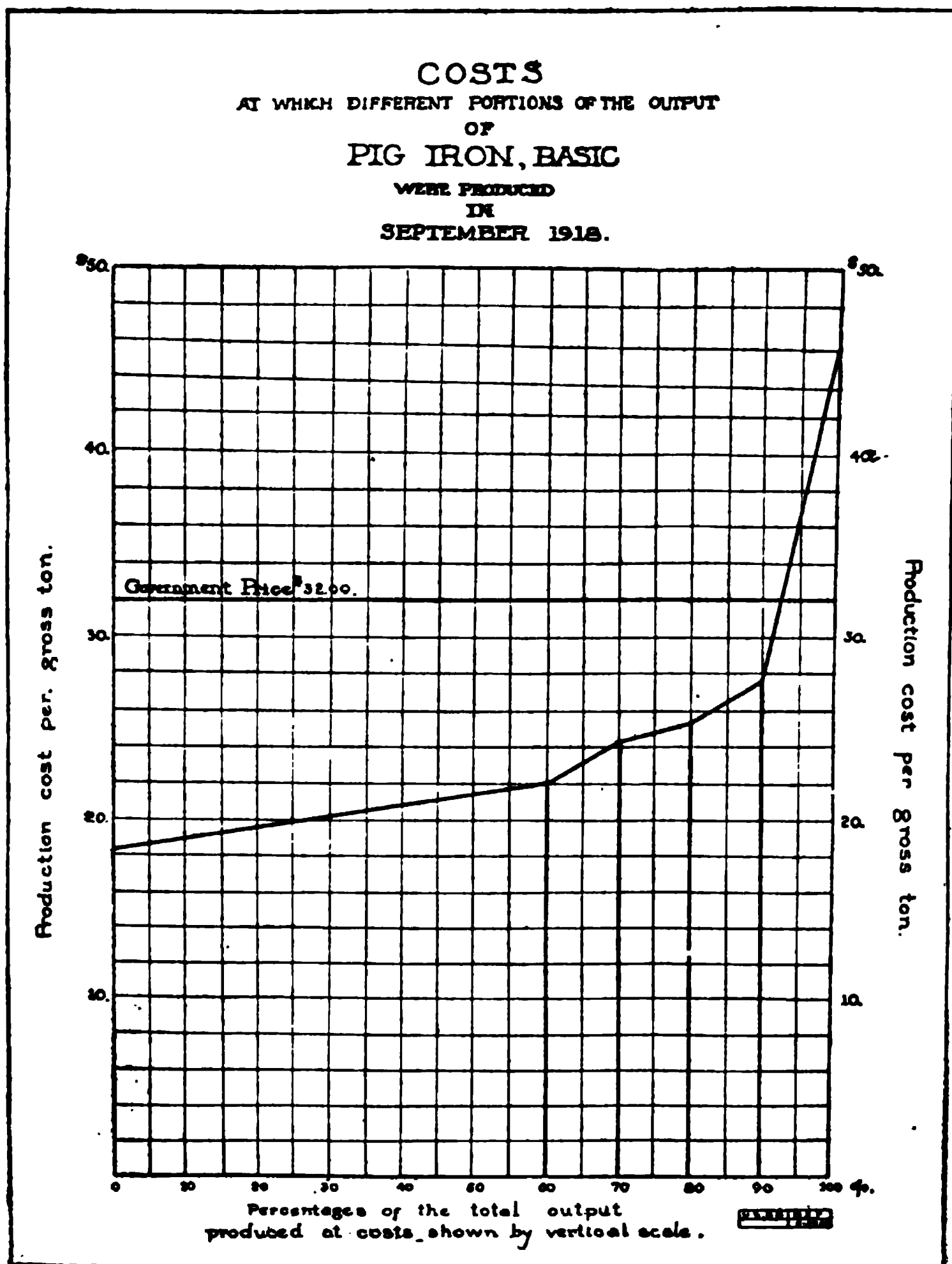


Costs at which different portions of the output of coke, beehive, were produced in September, 1918.

highest-cost producers had a capacity to supply only the last 10 per cent of maximum production, and that virtually 90 per cent of the possible output of the country would be sustained by fixing the price at \$6 per ton. It was the unwritten rule both of the price-fixing committee and the Fuel Administration to fix a price high enough to assure the output of about 85 or 90 per cent of the absolute maximum production of the country.

It is of especial interest to study by way of example, the several production costs, which follow in table or chart form as reported by the Federal Trade Commission or the Tariff Commission, and the prevailing fixed prices for the same months. The Government fixed price of \$32 per ton for basic pig iron in September, 1918, clearly was high enough to bring out over 90 per cent of the possible production.

The base price of \$73 per gross ton for forging ingots (open hearth) was apparently high enough to draw out virtually the whole production. Structural shapes were fixed at a point to encourage over 90 per cent of the production, and so, too, were plates.

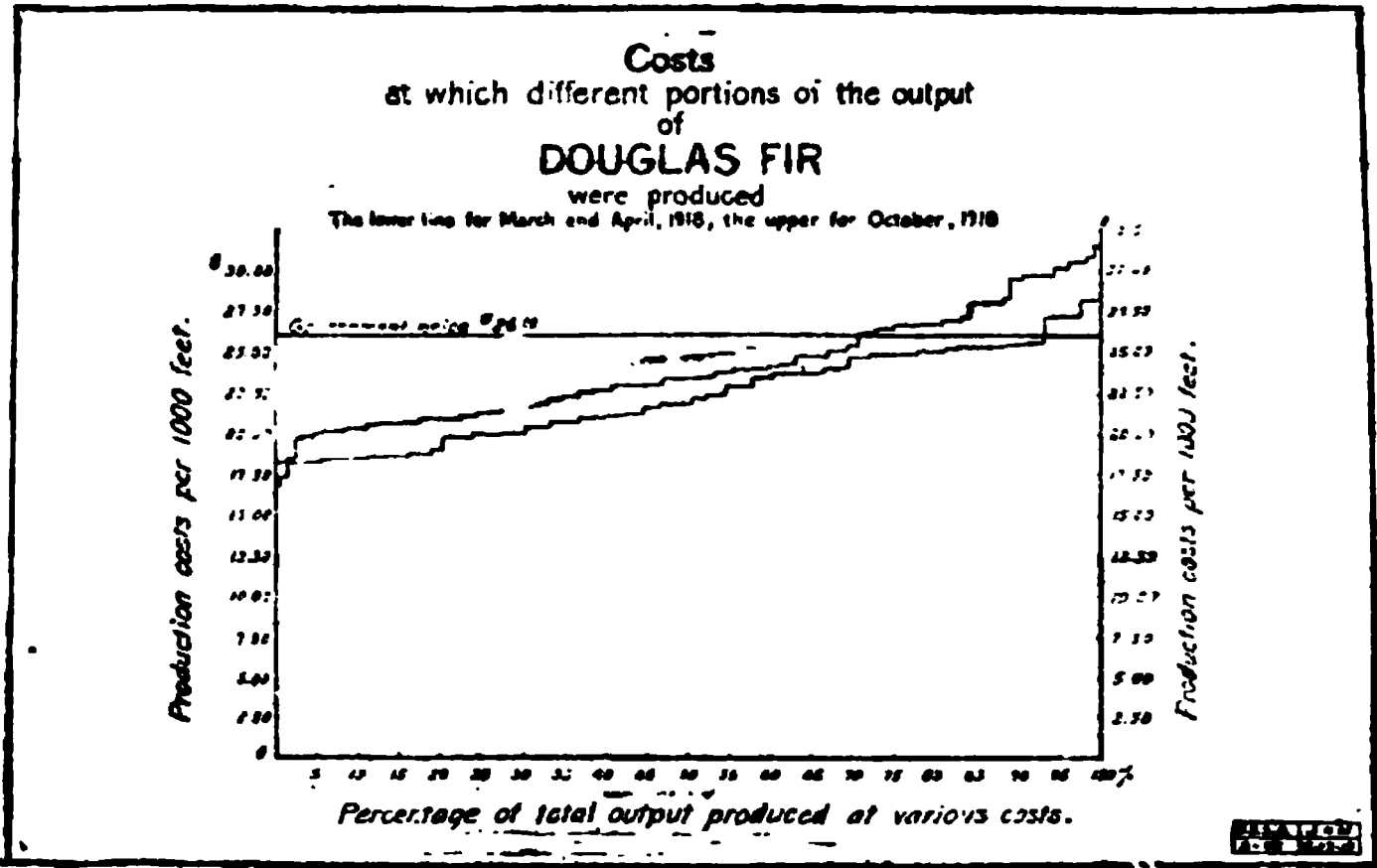


Costs at which different portions of the output of pig iron, basic, were produced in September, 1918.

The two cost lines for Douglas fir lumber in Washington and Oregon show how the cost curve for October, 1918, ran above that of the spring previous. The previous maximum price of \$26 per thousand was left unchanged, however, because the same output was no longer needed.¹

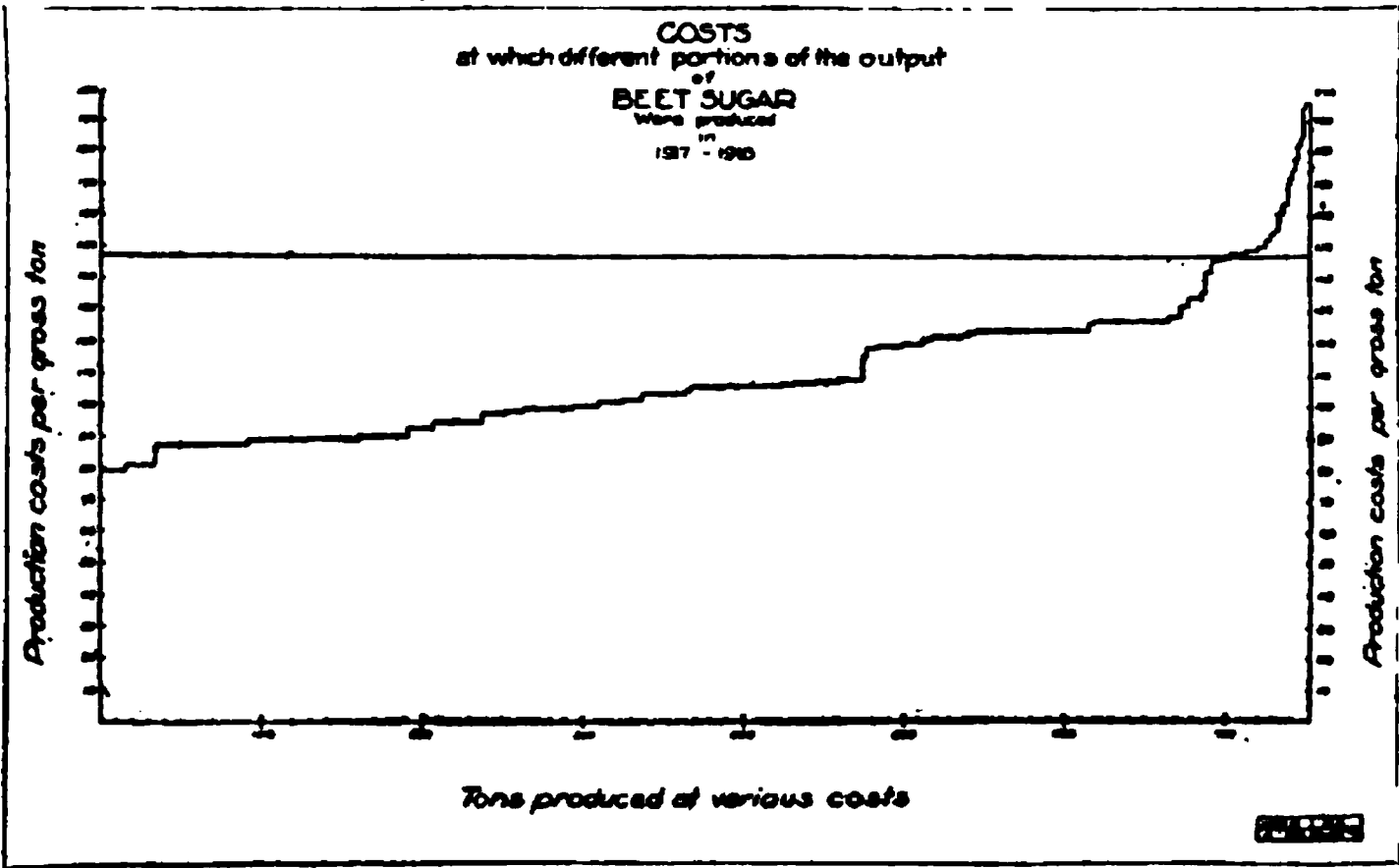
¹ Data given by F. W. Taussig.

The earlier fixed price for the 1917-18 crop of beet sugar of \$147 per ton at New York, was found to afford adequate return for the



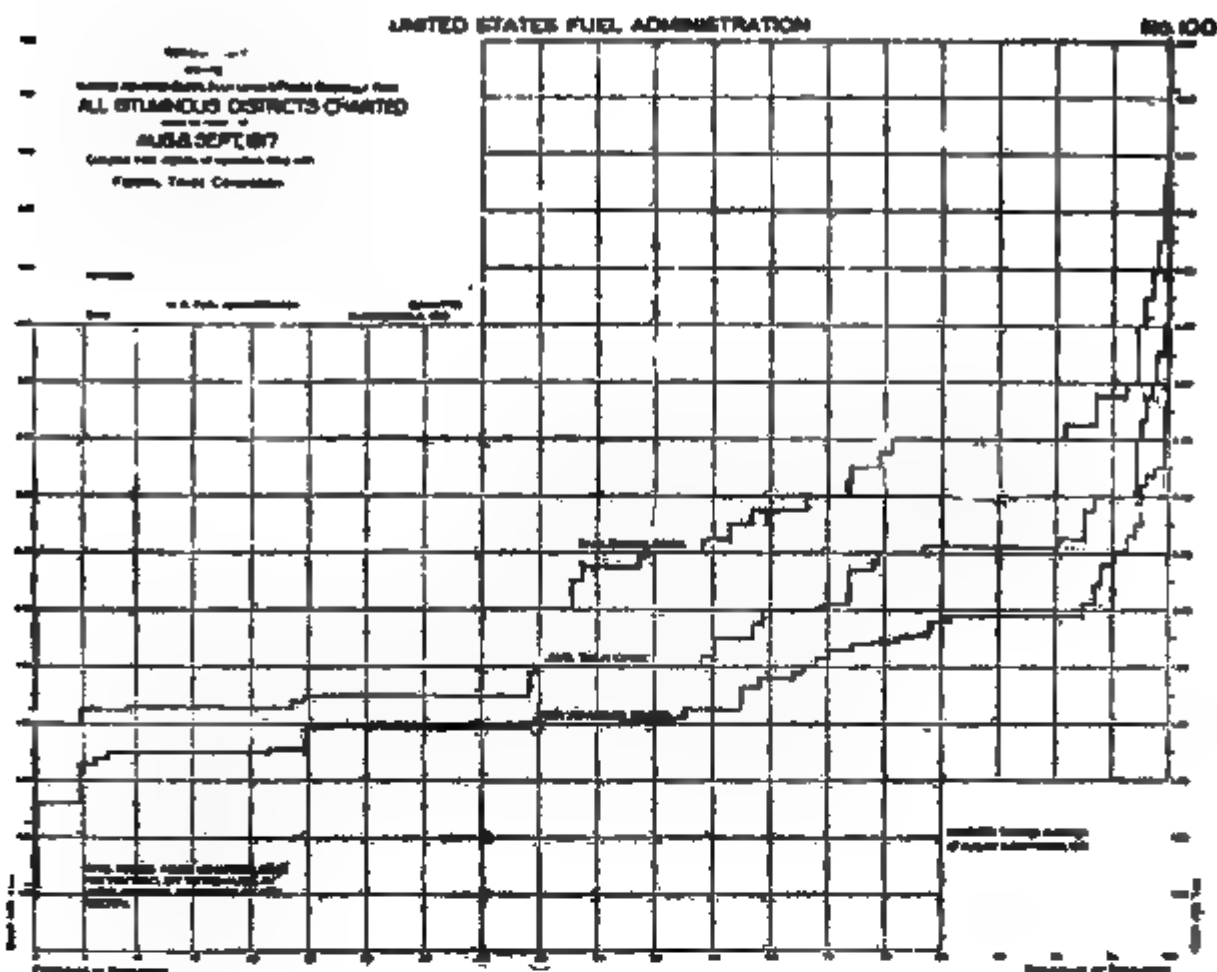
Costs at which different portions of the output of Douglas fir were produced in March, April, and October. 1918.

production only of about 82 per cent of the crop.¹ The Food Administration, therefore, after an investigation into the costs of producing sugar beets, found it necessary later to increase the price to \$176.40

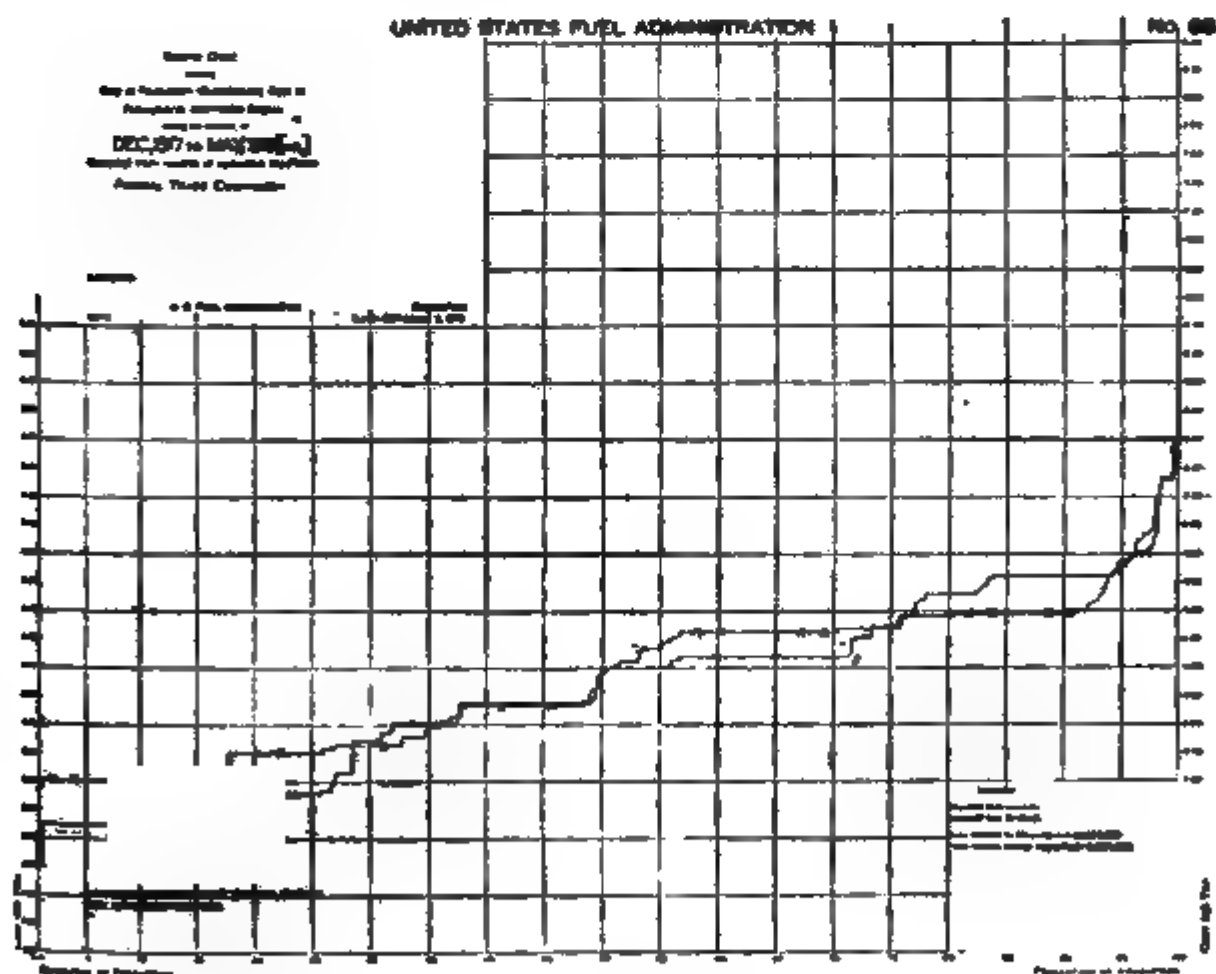


Costs at which different portions of the output of beet sugar were produced in 1917-18 per ton in order to cover costs for about 90 per cent of the forthcoming crop.

¹ The 1917-18 crop of beet sugar was about 848,800 tons.



Average adjusted costs, bulk lines, and prices originally fixed for all bituminous coal districts charted during August and September, 1917, 37,357,000 tonnage, average of August and September, 1917.



Graphic chart showing cost of production of anthracite coal in Pennsylvania anthracite region during the period—December, 1917, to May, 1918; reported cost, adjusted cost, tons reported by 83 operators, 33,039,655; tons, monthly average reported, 5,506,609.

COSTS FOUND BY THE FEDERAL TRADE COMMISSION FOR SEPTEMBER, 1918.

BEEHIVE COKE.

[Government price \$6 per net ton.]

	Production cost per gross ton.
Companies producing up to 60 per cent of total-----	\$2.93-\$4.44
Companies producing over 60 to 70 per cent of total-----	4.44- 4.99
Companies producing over 70 to 80 per cent of total-----	4.99- 5.44
Companies producing over 80 to 90 per cent of total-----	5.44- 6.47
Companies producing over 90 to 100 per cent of total-----	6.47-11.45

PIG IRON (BASIC).

[Government price \$82 per ton.]

Companies producing up to 60 per cent of total-----	\$18.14-\$22.06
Companies producing over 60 to 70 per cent of total-----	22.06- 24.32
Companies producing over 70 to 80 per cent of total-----	24.32- 25.41
Companies producing over 80 to 90 per cent of total-----	25.41- 27.49
Companies producing over 90 to 100 per cent of total-----	27.49- 45.72

INGOTS (OPEN HEARTH).

[Government price \$73 per ton.]

Companies producing up to 60 per cent of total-----	\$30.60-\$33.42
Companies producing over 60 to 70 per cent of total-----	33.42- 35.16
Companies producing over 70 to 80 per cent of total-----	35.16- 39.77
Companies producing over 80 to 90 per cent of total-----	39.77- 41.86
Companies producing over 90 to 100 per cent of total-----	41.86- 66.34

STRUCTURAL SHAPES.

[Government price \$3 per 100 pounds.]

Companies producing up to 60 per cent of total-----	\$45.54-----
Companies producing over 60 to 70 per cent of total-----	45.54-\$49.37
Companies producing over 70 to 80 per cent of total-----	49.37- 52.07
Companies producing over 80 to 90 per cent of total-----	52.07- 57.69
Companies producing over 90 to 100 per cent of total-----	57.69- 76.79

PLATES—SHEARED.

[Government price \$3.25 per 100 pounds.]

Companies producing up to 60 per cent of total-----	\$46.30-\$56.80
Companies producing over 60 to 70 per cent of total-----	56.80- 59.56
Companies producing over 70 to 80 per cent of total-----	59.56-----
Companies producing over 80 to 90 per cent of total-----	59.56- 68.28
Companies producing over 90 to 100 per cent of total-----	68.28- 82.25

MERCHANT BAR.

[Government price \$3.50 per 100 pounds.]

Companies producing up to 60 per cent of total-----	\$44.82-\$48.45
Companies producing over 60 to 70 per cent of total-----	48.45- 48.74
Companies producing over 70 to 80 per cent of total-----	48.74- 53.38
Companies producing over 80 to 90 per cent of total-----	53.38- 68.98
Companies producing over 90 to 100 per cent of total-----	68.98- 87.15

One of the most interesting studies of the relation of bulk line to the average costs and price fixed is afforded by the accompanying chart, representing the country-wide costs of producing anthracite and bituminous coal. The engineering committee of the Fuel Administration, after adjusting the reported costs, established a bulk line above which the Fuel Administrator personally allowed a percent of profit and fixed the price. The latter two charts pertaining to coal prices fixed are designed, of course, to show results for the country as a whole and are not the specific ones used by the Fuel

Administration in setting prices. The price differentials for each district were actually determined by separate district charts, made, however, in precisely the same manner as these summary charts.

KEY TO COST CHART OF BITUMINOUS COAL.

State and district.	Average tonnage, August-September, 1917.	Per cent total.	Costs.		Bulk line.	Price fixed.	Cumulative, per cent.		
			Re-reported.	Adjusted.			Average cost.	Bulk.	Price.
Alabama:									
No. 1.....	380,000	1.02	\$1.47	\$1.48	\$1.68	\$2.10	7.34	24.73	48.82
No. 2.....	185,000	.50	2.49	2.47	2.75	3.10	98.51	98.51	98.51
No. 3.....	790,000	2.12	1.87	1.86	2.14	2.50	72.18	74.09	74.23
No. 4.....	90,000	.24	1.86	1.96	2.16	2.50	79.35	74.47	74.47
Arkansas-Oklahoma.....	272,500	.73	2.50	2.50½	2.90	3.30	99.59	99.59	99.59
Colorado:									
Domestic.....	462,000	1.24	2.04½	1.96½	2.20	2.55	80.59	78.25	75.71
Trinidad.....	320,000	.86	1.88	1.80	1.84	2.19	68.94	60.31	54.59
Lignite.....	145,000	.39	1.84½	1.78	1.84	2.35	68.08	59.45	64.43
Illinois:									
No. 1.....	310,000	.83	2.28½	2.26½	2.40	2.75	97.20	97.20	96.10
Nos. 2 and 5.....	417,500	1.12	1.86	1.83	2.00	2.40	70.06	69.44	69.44
Nos. 3, 4, and 6.....	5,525,000	14.40	1.48½	1.50½	1.66	2.00	21.74	23.71	23.71
Indiana.....	1,770,000	4.74	1.58	1.61	1.80	2.00	56.89	55.21	47.80
Iowa:									
Appanoose.....	140,000	.87	2.42	2.44	2.60	3.00	98.01	97.57	97.57
Des Moines.....	410,000	1.10	2.14	2.16	2.40	2.80	95.06	95.10	97.20
Kansas, Cherokee, and Crawford ..	475,000	1.27	2.16	2.21	2.40	2.75	96.37	96.37	95.27
Kentucky:									
No. 1, western.....	658,000	1.76	1.43	1.46	1.65	2.00	6.32	6.32	6.32
No. 2 (Tennessee and Virginia) .	1,135,000	3.04	1.54	1.60	1.80	2.20	49.77	47.93	57.63
No. 3 (east Kentucky and east Tennessee).....	900,000	2.41	2.02	1.91	2.25	2.65	78.86	92.57	93.36
Missouri:									
No. 1.....	240,000	.64	2.03	2.09	2.40	2.75	93.89	94.00	94.00
No. 2.....	130,000	.35	2.47	2.47	2.80	3.20	98.86	98.86	98.86
Montana, Utah, and Wyoming....	950,000	2.54	1.89	1.89	2.20	2.60	76.31	77.01	78.25
North Dakota:									
North district.....	17,000	.04	2.38	2.17	2.25	2.65	95.10	95.10	90.95
South district.....	40,000	.11	1.47	1.55	1.70	2.10	24.84	24.84	48.93
New Mexico, Raton.....	261,000	.70	1.55½	1.73	1.78	2.35	64.14	44.89	64.04
Oklahoma:									
(See Arkansas.)									
McAllister.....	70,000	.19	3.05½	3.15½	3.54	3.95	99.97	99.97	99.97
Ohio:									
No. 1. (See West Virginia No. 9.)									
Nos. 2 and 7.....	165,000	.44	2.38	2.30	2.67	3.10	97.64	98.01	98.01
No. 3.....	591,000	1.59	1.61	1.65	1.80	2.20	59.24	59.06	59.22
Nos. 4 and 6.....	296,000	.79	2.11	2.02	2.35	2.60	93.25	93.36	90.91
No. 5.....	360,000	.96	1.61	1.65	1.95	2.35	60.20	64.41	65.39
No. 8.....	1,115,000	2.99	1.50	1.51	1.65	2.00	24.73	9.31	9.31
Pennsylvania:									
No. 1, central.....	4,310,000	11.87							

KEY TO COST CHART OF ANTHRACITE COAL.

Ton-nage.	Costs.		Ad-justed standard per cent sizes.	General.			Company.			Individual.		
	Re-ported.	Ad-justed.		Per cent.	Re-ported cum.	Ad-justed cum.	Per cent.	Re-ported cum.	Ad-justed cum.	Per cent.	Re-ported cum.	Ad-justed cum.
145,672	\$4.961	\$4.783	- 3.6	0.44	87.70	88.87	.....	.....	.....	1.83	81.53	80.23
46,277	5.26	5.45	+ 3.4	.14	95.64	98.48	.....	.....	.....	.58	91.40	95.98
1,367	4.52	4.51	.....	.01	78.18	80.24	.....	.....	.....	.02	58.08	59.26
5,231	4.96	4.14	- 6.92	.02	87.72	62.00	.....	.....	.....	.07	81.06	36.96
9,740	4.36	4.06	+ 4.5	.03	74.87	60.65	.....	.....	.....	.12	50.74	33.74
119,637	4.30	4.46	+ 3.6	.36	69.78	77.73	.....	.....	.....	1.50	44.64	55.77
80,389	4.76	5.28	+11.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
2,799	5.998	5.77	- 0.5	.01	98.64	99.50	.....	.....	.....	.04	97.23	99.07
13,438	4.64	4.49	+13.2	.04	80.49	79.52	.....	.....	.....	.17	65.38	56.39
14,122	3.37	3.78	+ 6.8	.04	29.62	43.79	.....	.....	.....	.18	8.03	18.76
24,981	4.88	5.40	+10.8	.08	85.64	98.72	.....	.....	.....	.31	77.10	96.35
28,578	4.21	4.22	+ 0.1	.09	67.66	66.50	.....	.....	.....	.36	39.94	42.11
120,063	2.92	3.27	+ 5.3	.36	12.13	22.25	.....	.....	.....	1.51	2.54	2.54
43,957	4.59	4.06	+ 1.0	.13	79.66	59.31	.....	.....	.....	.55	63.15	33.62
126,571	3.72	3.32	-10.65	.28	44.28	24.12	0.50	54.07	29.66	.....	.....	.....
182,005	2.77	3.04	+ 5.46	.40	5.44	11.81	.53	6.85	14.65	.....	.....	.....
122,642	3.47	3.54	+ 0.72	.37	35.26	32.79	.49	43.96	39.86	.....	.....	.....
145,292	3.65	3.77	+ 3.22	.44	41.70	42.79	.58	50.67	49.53	.....	.....	.....
143,369	3.80	3.88	+ 2.27	.43	48.48	49.84	.57	57.30	56.65	.....	.....	.....
279,040	4.77	4.82	+ 1.1	.84	84.77	90.48	.....	.....	.....	3.51	74.80	94.21
69,850	3.95	4.12	+ 4.6	.21	55.39	61.98	.....	.....	.....	.88	27.71	36.89
266,955	5.77	5.39	+ 1.7	.81	98.63	98.15	1.06	99.16	99.15	.....	.....	.....
31,226	4.77	4.69	- 1.38	.09	84.86	85.30	.12	88.12	91.23	.....	.....	.....
212,932	5.24	5.03	- 3.96	.64	94.40	94.36	.85	95.60	95.59	.....	.....	.....
88,193	6.04	5.69	- 5.86	.27	98.94	99.37	.35	99.51	99.65	.....	.....	.....
87,622	6.09	6.30	+ 3.44	.27	99.91	100.00	.35	100.00	100.00	.....	.....	.....
371,192	4.97	4.66	- 5.22	1.12	89.36	84.62	1.48	91.19	90.34	.....	.....	.....
315,537	4.32	3.77	- 9.00	.96	71.94	42.75	1.26	79.07	50.79	.....	.....	.....
450,209	5.18	4.47	- 8.51	1.36	93.20	79.37	1.79	94.75	86.85	.....	.....	.....
204,783	3.96	3.89	- 3.63	.62	56.67	50.46	.82	65.92	57.47	.....	.....	.....
376,876	4.02	4.04	- 0.18	1.14	61.29	58.52	1.50	71.00	66.59	.....	.....	.....
182,572	5.24	4.92	- 3.59	.55	94.95	91.97	.73	96.33	94.13	.....	.....	.....
198,420	4.34	4.18	- 5.95	.60	74.84	63.23	.79	82.58	70.73	.....	.....	.....
26,778	3.83	3.83	- 5.98	.81	51.70	46.40	1.07	61.42	53.62	.....	.....	.....
365,180	4.67	4.04	- 7.72	1.11	81.85	57.38	1.46	86.82	65.09	.....	.....	.....
337,037	3.37	3.27	- 3.10	1.02	30.64	21.73	1.34	37.87	27.37	.....	.....	.....
183,059	5.25	5.23	- 1.70	.65	95.50	96.23	.73	97.06	97.80	.....	.....	.....
505,178	3.05	2.80	- 8.37	1.53	15.48	5.27	2.01	19.64	6.94	.....	.....	.....
639,950	2.53	2.64	- 2.76	1.94	8.47	1.94	2.55	4.58	2.55	.....	.....	.....
306,519	3.14	3.18	- 1.94	.93	18.19	17.86	1.22	21.90	20.96	.....	.....	.....
417,865	3.25	3.42	- 1.13	1.26	23.93	27.58	1.67	29.08	34.22	.....	.....	.....
239,712	3.42	3.70	+ 4.03	.73	34.37	40.14	.96	42.78	47.59	.....	.....	.....
228,806	2.77	2.92	- 4.24	.69	6.13	7.98	.91	7.76	59.76	.....	.....	.....
214,648	3.34	3.24	- 4.49	.68	23.25	19.98	.86	34.77	23.76	.....	.....	.....
159,284	3.98	3.90	- 1.94	.48	38.30	31.53	.64	67.68	58.85	.....	.....	.....
30,404	4.01	4.18	- 2.51	.09	59.41	64.54	.12	68.78	72.37	.....	.....	.....
484,884	2.81	2.87	- 1.29	1.47	7.60	6.74	1.93	9.69	8.87	.....	.....	.....
184,142	3.39	3.71	+ 4.93	.56	32.90	41.80	.73	40.84	48.95	.....	.....	.....
99,147	3.57	3.51	- 1.77	.30	39.92	30.21	.40	48.49	36.48	.....	.....	.....
195,067	3.21	3.44	+ 2.5	.59	21.11	28.55	.78	25.37	35.49	.....	.....	.....
255,547	2.65	2.98	+ 3.23	.77	5.04	9.54	1.02	6.32	11.65	.....	.....	.....
108,359	4.19	4.23	- 1.98	.23	67.97	68.07	.43	76.12	75.92	.....	.....	.....
139,848	3.49	3.67	+ 3.23	.42	36.16	38.28	.56	45.15	45.14	.....	.....	.....
102,590	4.11	4.45	+ 6.33	.31	65.21	76.96	.41	73.80	84.69	.....	.....	.....
260,069	3.09	2.98	- 3.74	.79	16.27	8.77	1.04	20.68	10.63	.....	.....	.....
310,445	2.84	3.05	+ 0.87	.94	10.10	12.75	1.24	14.22	15.89	.....	.....	.....
83,971	3.77	3.79	+ 0.65	.25	46.46	44.04	.33	55.74	51.12	.....	.....	.....
190,071	3.56	3.67	- 1.35	.58	39.59	38.86	.76	48.09	45.90	.....	.....	.....
100,473	4.64	4.56	- 1.9	.30	80.45	81.20	.....	.....	.....	1.26	65.21	62.21
10,764	4.05	4.49	+10.7	.03	63.75	79.48	.....	.....	.....	.14	31.04	54.28
112,386	4.23	4.35	+ 4.7	.34	68.52	72.11	.....	.....	.....	1.41	41.25	46.60
77,261	5.20	4.71	- 3.0	.23	93.76	86.80	.....	.....	.....	.97	90.82	72.78
16,014	5.15	5.23	+ 4.4	.05	91.76	95.68	.....	.....	.....	.20	88.16	91.22
51,076	5.42	4.85	- 9.5	.15	96.64	91.42	.....	.....	.....	.64	94.45	85.17
24,815	4.69	4.48	+ 4.3	.08	82.27	79.45	.....	.....	.....	.31	66.97	56.08
94,535	3.19	3.28	+ 1.1	.29	20.18	23.13	.....	.....	.....	1.19	7.85	8.73
38,371	5.06	5.67	+16.9	.12	90.23	99.10	.....	.....	.....	.48	84.22	96.53
39,667	3.65	4.00	+ 2.7	.12	41.26	52.17	.....	.....	.....	.50	12.58	24.91
81,580	4.64	4.44	- 2.0	.....	.....	.....	.....	.....	.....	.....	.....	.....
78,899	5.06	4.86	- 3.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
65,090	3.91	3.94	+ 3.7	.20	53.25	52.05	.....	.....	.....	.82	22.08	26.41
28,722	5.07	4.93	- 2.6	.09	90.62	92.68	.....	.....	.....	.36	85.85	88.12
12,919	5.22	.....	+ 1.8	.....	.....	.....	.....	.....	.....	.....	.....	.....
365,099	3.17	3.53	- 2.61	1.11	19.80	22.41	1.46	23.36	39.37	.....	.....	.....
37,175	4.00	4.19	- 8.24	.11	59.32	64.65	.15	68.66	72.52	.....	.....	.....
27,960	3.41	3.60	- 9.95	.08	32.98	35.50	.11	40.95	42.44	.....	.....	.....
242,028	2.87	3.24	- 2.51	.73	11.77	20.71	.96	15.18	26.08	.....	.....	.....
31,141	3.80	4.01	+ 0.2	.09	48.99	51.18	.....	.....	.....	.39	21.26	26.69

KEY TO COST CHART OF ANTHRACITE COAL—Continued.

Ton- nage.	Costs.		Ad- justed standard per cent sizes.	General.			Company.			Individual.		
	Re- ported.	Ad- justed.		Per cent.	Re- ported cum.	Ad- justed cum.	Per cent.	Re- ported cum.	Ad- justed cum.	Per cent.	Re- ported cum.	Ad- justed cum.
163,227	\$3.77	\$3.73	- 1.6	.49	46.21	42.35	.....	.....	.....	2.05	16.61	18.58
33,476	5.70	5.71	+ 0.1	.10	97.82	99.49	.....	.....	.....	.42	97.19	99.03
396,962	4.31	4.03	- 6.36	1.20	70.98	56.27	.....	.....	.....	4.99	49.63	33.07
82,638	4.67	4.16	- 8.9	.25	80.74	62.63	.....	.....	.....	1.04	66.42	39.57
55,156	3.94	.....	+ 2.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
335,330	3.74	4.01	+ 5.51	1.01	45.29	54.09	1.34	55.41	62.46	.....	.....	.....
407,650	4.33	4.39	+ 2.08	1.23	73.41	74.77	1.63	80.70	82.80	.....	.....	.....
332,336	3.82	4.18	+ 7.8	1.16	51.89	64.39	1.52	60.35	72.25	.....	.....	.....
172,128	4.22	4.37	+ 2.3	.52	68.18	72.83	.69	77.20	80.28	.....	.....	.....
217,662	3.95	4.60	+ 14.81	.66	56.05	82.45	.87	65.10	88.86	.....	.....	.....
181,620	4.01	4.29	+ 5.75	.55	59.96	70.95	.72	69.50	78.83	.....	.....	.....
153,522	3.87	3.66	- 6.0	.46	52.64	37.86	.61	62.66	44.58	.....	.....	.....
108,589	3.23	3.08	- 4.81	.33	22.13	13.16	.43	26.71	16.43	.....	.....	.....
147,428	3.66	3.50	- 5.11	.45	42.15	29.91	.59	51.26	36.08	.....	.....	.....
26,906	3.46	3.06	- 13.8	.08	34.89	12.83	.11	43.47	16.20	.....	.....	.....
124,125	3.24	3.43	+ 4.75	.38	22.51	27.96	.49	27.20	34.71	.....	.....	.....
88,528	5.43	4.93	- 4.41	.27	97.38	92.95	.35	97.76	94.48	.....	.....	.....
97,534	4.59	4.26	- 7.21	.30	79.96	68.78	.39	85.36	76.85	.....	.....	.....
206,745	3.98	3.83	- 3.88	.63	58.83	47.03	.83	68.51	54.45	.....	.....	.....
161,604	4.05	4.22	+ 4.33	.49	63.62	67.47	.64	73.39	75.49	.....	.....	.....
187,028	3.97	4.11	+ 3.45	.57	57.72	61.77	.75	67.04	69.94	.....	.....	.....
195,007	4.02	4.27	+ 5.42	.59	61.88	69.80	.78	72.32	77.63	.....	.....	.....
157,978	4.30	4.22	- 4.45	.48	75.35	66.98	.63	83.21	74.85	.....	.....	.....
159,271	3.36	3.22	- 5.1	.48	29.08	17.69	.63	35.87	22.06	.....	.....	.....
72,448	4.81	5.27	+ 8.48	.22	85.56	96.87	.29	88.41	98.09	.....	.....	.....
227,686	3.22	3.02	- 8.66	.69	21.80	11.41	.91	26.28	14.12	.....	.....	.....
113,817	3.20	3.11	- 5.20	.34	20.52	14.31	.45	24.50	17.94	.....	.....	.....
284,953	3.04	2.76	- 11.44	.86	13.95	2.80	1.14	17.63	3.69	.....	.....	.....
184,286	3.56	3.37	- 5.81	.56	39.01	25.18	.73	47.33	31.05	.....	.....	.....
200,475	3.66	3.31	- 9.43	.61	42.76	23.74	.80	52.06	29.16	.....	.....	.....
64,892	3.60	3.22	- 10.54	.20	40.86	17.89	.26	49.72	22.32	.....	.....	.....
128,950	3.28	3.11	- 7.01	.30	25.70	13.97	.51	31.41	17.49	.....	.....	.....
91,027	4.68	4.51	- 3.46	.28	82.19	80.52	.36	87.18	87.21	.....	.....	.....
164,188	4.59	3.92	- 12.86	.32	78.15	31.85	.42	84.59	60.18	.....	.....	.....
58,842	3.25	3.27	- 3.43	.16	22.67	21.89	.21	27.41	27.58	.....	.....	.....
122,154	3.93	3.61	- 8.14	.40	54.80	25.90	.53	63.73	43.97	.....	.....	.....
242,729	3.57	3.59	- 1.66	.74	40.66	35.42	.97	49.46	43.33	.....	.....	.....
244,420	3.81	3.52	- 9.48	.74	50.73	31.30	.97	58.83	37.91	.....	.....	.....
145,581	3.42	3.22	- 9.55	.44	34.81	18.33	.58	43.36	22.90	.....	.....	.....
158,148	3.84	3.71	- 5.1	.48	52.18	40.62	.63	62.05	48.22	.....	.....	.....
312,131	2.84	2.79	- 9.3	.94	11.04	3.74	1.24	12.98	4.93	.....	.....	.....
274,155	3.29	3.17	- 6.56	.83	26.53	15.93	1.09	32.50	19.74	.....	.....	.....
176,981	3.53	3.135	- 6.91	.54	37.61	14.85	.71	46.60	18.65	.....	.....	.....
98,414	4.95	4.202	- 11.84	.30	87.26	65.76	.39	89.71	73.52	.....	.....	.....
166,047	3.36	3.335	- 4.25	.50	29.58	24.62	.66	36.53	30.32	.....	.....	.....
116,247	3.35	3.526	- .93	.35	28.60	30.56	.46	35.23	36.94	.....	.....	.....
300,277	3.14	3.44	+ 4.3	.91	17.26	29.46	.....	.....	.....	3.77	6.68	7.50
126,586	4.48	4.45	- 1.6	.41	77.53	77.37	.....	.....	.....	1.72	58.08	54.27
44,074	6.46	6.01	- 2.7	.13	99.63	99.63	.....	.....	.....	.55	99.62	99.62
79,355	4.71	4.71	.....	.24	82.89	86.06	.....	.....	.....	1.00	69.54	69.68
83,152	5.14	5.54	+ 7.84	.25	91.43	98.73	.....	.....	.....	1.05	87.96	96.99
30,582	7.04	6.11	+ 4.05	.09	100.00	99.72	.....	.....	.....	.38	99.62	99.62
156,819	5.43	5.37	+ 8.42	.47	97.11	97.34	.....	.....	.....	1.97	96.42	95.05
122,820	4.22	.....	+ 4.67	.....	.....	.....	.....	.....	.....	.....	.....	.....
176,227	4.97	4.70	- 5.3	.52	88.24	85.82	.....	.....	.....	2.14	83.74	68.68
65,989	5.15	5.17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
118,130	3.16	.....	- 4.32	.....	.....	.....	.....	.....	.....	.....	.....	.....
16,252	3.78	4.06	+ 2.87	.31	46.77	60.96	.....	.....	.....	1.28	18.67	35.02
116,197	3.59	3.85	+ 10.1	.35	36.51	49.22	.....	.....	.....	1.45	9.48	24.70
46,983	4.79	4.62	- 2.3	.14	85.34	82.97	.....	.....	.....	1.57	30.11	28.53
58,444	4.77	4.92	+ 7.6	.15	85.01	92.37	.....	.....	.....	.63	75.43	86.83
126,122	3.96	4.15	+ 4.3	.38	59.21	62.38	.....	.....	.....	.59	76.79	64.37
89,541	4.74	4.94	+ 4.3	.18	83.31	93.13	.....	.....	.....	.75	71.29	88.87
189,394	4.42	4.71	+ 6.5	.51	77.00	86.57	.....	.....	.....	2.13	55.82	71.81
29,577	4.56	4.65	+ 0.8	.09	79.15	83.31	.....	.....	.....	.37	61.01	65.77
112,699	4.08	4.20	+ 2.9	.34	64.99	65.46	.....	.....	.....	1.42	34.60	41.23
81,989	2.60	3.14	+ 10.6	.25	3.72	15.10	.....	.....	.....	1.08	.....	.....
97,579	4.21	4.72	+ 16.1	.30	67.27	87.10	.....	.....	.....	1.23	39.58	74.01
278,430	3.554	3.651	+ 2.7	.84	38.45	37.40	.....	.....	.....	3.50	12.98	13.72
382,711	3.237	3.591	- 4.81	1.07	27.60	34.68	1.41	33.91	42.36	.....	.....	.....
326,871	2.98	3.241	- 6.81	.96	13.09	19.98	1.31	16.49	25.07	.....	.....	.....
326,894	3.283	4.057	+ 2.44	.98	31.62	60.29	1.30	39.17	69.19	.....	.....	.....
375,896	2.89	3.41	+ 0.21	1.14	8.74	26.32	1.50	11.19	32.55	.....	.....	.....
92,112	3.68	4.05	- 0.98	.28	41.14	58.80	.37	50.09	66.96	.....	.....	.....
126,244	2.84	3.09	- 8.65	.42	9.16	12.58	.55	11.74	16.98	.....	.....	.....
272,981	3.27	3.58	- 3.5	.83	24.76	33.61	1.09	30.17	40.95	.....	.....	.....
116,842	2.51	3.18	- 0.92	.35	1.53	17.21	.47	2.03	21.43	.....	.....	.....

KEY TO COST CHART OF ANTHRACITE COAL—Continued.

Ton- nage.	Costs.		Ad- justed standard per cent sizes.	General.			Company.			Individual.		
	Re- ported.	Ad- justed.		Per cent.	Re- ported cum.	Ad- justed cum.	Per cent.	Re- ported cum.	Ad- justed cum.	Per cent.	Re- ported cum.	Ad- justed cum.
890,540	\$2.06	\$2.99	+ 8.62	1.18	1.18	10.72	1.56	1.56	13.21			
180,871	2.63	2.89	- 7.71	.55	4.27	7.29	.72	5.30	9.59			
90,599	4.55	4.22	- 7.2	.27	79.06	67.74				1.14	60.64	43.25
160,034	3.69	3.84	- 3.26	.48	43.24	48.12	.64	52.70	55.09			
52,709	5.37	4.59	-12.9	.16	96.17	81.79	.21	97.41	87.99			
186,552	3.52	3.90	+ 4.86	.56	37.07	51.05	.74	45.89	58.21			
219,333	3.42	3.80	+ 3.33	.66	33.64	45.12	.87	41.82	52.55			
92,918	5.14	4.78	- 3.91	.28	91.71	88.43	.37	92.96	91.60			
184,978	5.04	5.13	- 2.79	.56	90.11	95.31	.74	92.19	96.67			
97,621	4.21	4.43	- 0.76	.20	67.57	76.65	.39	76.51	84.28			
204,465	4.76	4.38	- 5.2	.62	83.93	73.45	.82	88.00	81.05			
126,562	3.95	4.05	+ 2.90	.38	55.18	59.18	.50	64.23	67.46			
157,015	3.47	4.02	+ 6.63	.48	35.74	54.66	.63	44.59	63.09			
182,768	3.28	3.67	+ 8.24	.55	25.31	39.41	.73	30.90	46.63			
140,385	3.80	3.70	- 5.73	.42	46.90	44.46	.56	57.86	51.68			
95,808	4.52	4.69	+ 1.1	.29	78.79	85.21	.38	84.97	91.11			
178,191	4.19	4.33	- 0.92	.54	66.64	71.77	.71	75.69	79.54			
134,340	4.02	4.25	- 0.47	.41	62.29	68.48	.54	71.54	76.46			
153,685	4.23	4.19	- 0.88	.47	69.09	65.12	.61	77.81	73.13			
248,895	3.79	3.86	- 3.71	.75	47.52	48.87	.99	56.73	56.08			
218,248	3.70	4.79	- 5.38	.66	43.90	89.53	.87	53.57	92.47			
134,502	3.87	4.03	- 0.85	.41	53.05	55.07	.54	63.20	63.66			
93,589	3.97	4.45	+ 4.51	.28	57.15	78.01	.37	66.29	85.06			
120,120	4.13	4.28	- 2.49	.36	65.57	70.16	.48	74.28	78.11			
197,200	4.88	4.83	- 3.71	.60	86.24	91.08	.79	89.20	93.26			
174,447	4.168	4.213	- 5.71	.53	66.10	66.41	.70	74.98	74.22			
236,856	3.384	4.003	+ 8.65	.72	32.34	52.89	.94	40.11	61.12			
101,304	5.117	5.144	+ 2.56	.31	91.18	95.62	.40	92.59	97.07			
273,180	4.334	4.412	+ 0.69	.83	74.24	75.84	1.09	81.79	83.89			
141,801	4.407	4.570	+ 1.81	.49	76.49	81.63	.57	83.78	87.78			
138,540	4.702		+ 1.50									
161,074	5.070		+ 2.88									
126,417	4.573	4.523	- 1.1	.38	79.53	80.90				1.59	68.90	60.95
63,122	4.012	3.863	- 1.9	.19	60.15	49.41				.79	30.90	25.49
6,190	6.019	5.692	+ 1.3	.02	98.66	99.39				.08	97.31	96.61
27,844	3.095	3.828	+23.7	.06	16.35	47.11				.35	2.89	21.06
216,696	4.082	3.630	- 7.2	.66	64.65	36.56				2.72	37.32	10.22
37,140	4.521	4.803	+10.9	.11	78.50	89.64				.47	59.50	80.70
74,055	4.916	4.921	- 0.5	.22	86.46	92.59				.93	78.03	87.76
61,490	4.791	4.659	- 0.9	.19	85.20	83.50				.77	76.20	66.54
54,941	5.875		+ 0.3									
170,018	4.046	4.420	+12.0	.51	63.13	76.35				2.14	33.18	52.55
61,980	3.769	4.008	- 4.4	.19	45.72	53.08				.78	17.39	27.69
195,548	3.170	3.273	- 3.64	.59	19.89	22.84	.78	24.14	28.36			
37,719	6.184	5.410	-12.55	.11	99.49	98.34	.15	99.66	99.30			
36,092	5.305	4.851	- 8.56	.11	95.75	91.27	.14	97.20	93.40			
60,196	5.031	4.950	- 1.60	.18	89.55	93.31	.24	91.45	84.72			
4,164	14.499	5.00	-12.47	.01	89.37	93.64	.02	91.21	94.74			
30,585	4.923	4.381	-11.0	.09	86.55	73.54	.12	89.32	81.17			
98,443	4.501	4.669	+ 5.6	.30	77.83	84.92	.39	84.17	90.73			
108,625	4.037	4.057	- 0.2	.33	62.62	60.62	.43	72.75	67.89			
84,361	5.452	5.036	- 7.63	.26	97.64	94.62	.34	98.10	95.93			
2,219	5.363	5.205	+ 1.6	.01	96.01	95.63				.03	92.46	91.12
81,621	4.088	4.637	+10.2	.25	64.90	83.22				1.03	38.35	65.40
8,284	3.561	3.901	+ 5.7	.03	39.62	50.49				.10	13.08	25.59
41,100	4.470	4.210	+14.9	.12	77.12	65.88				.52	56.34	41.75
234,630	4.400	4.50	+ 2.23	.71	76.06	80.23				2.95	53.69	59.34
223,779	3.930	3.71	- 5.6	.68	54.40	41.30				2.81	26.83	16.43
140,087	6.07	5.27	-11.78	.42	99.37	96.65				1.76	97.31	93.08
142,391	4.24	4.27	+ 0.55	.43	69.42	69.21				1.79	43.14	45.04
84,102	5.12	5.59	+ 9.03	.25	90.87	98.98				1.06	86.91	98.05
100,691	5.07	4.73	- 6.67	.30	90.53	87.40				1.27	85.49	75.28
81,865	5.35	4.92	- 5.40	.25	96.00	92.22				1.03	92.43	86.20
175,310	3.80	3.84	+ 1.05	.53	48.05	47.64				2.20	20.87	23.23
124,792	4.70	4.61	- 1.90	.38	82.65	82.83				1.57	68.54	63.78
61,877	5.78	5.51	- 4.62									
95,610	7.91	7.06	- 6.81									
132,657	5.65	5.97	+ 5.77									
27,681	5.51	5.02	- 8.38	.08	97.72	93.72				.35	96.77	90.57
154,153	3.93	3.81	- 5.52	.47	53.72	45.59				2.81	26.83	20.70
79,014	4.33	4.07	- 6.00	.24	72.18	61.20				.99	50.62	36.01
79,168	4.73	4.28	- 8.02	.24	83.13	70.40				1.00	70.54	46.04
128,612	5.20	4.75	- 8.63	.33	93.53	87.73				1.37	89.85	76.63
107,283	5.40	4.97	- 8.00	.32	96.49	93.63				1.35	93.81	90.22
75,272	4.52	4.77	+ 5.6	.23	78.39	88.15				.95	59.03	78.40
78,054	3.77	4.40	+16.8	.24	45.53	75.01				.98	14.56	50.41
65,957	3.97	4.36	+ 9.8	.20	56.87	72.31				.83	28.54	49.43

KEY TO COST CHART OF ANTHRACITE COAL—Continued.

Ton- nage.	Costs.		Ad- justed standard per cent sizes.	General.			Company.			Individual.		
	Re- ported.	Ad- justed.		Per cent.	Re- ported cum.	Ad- justed cum.	Per cent.	Re- ported cum.	Ad- justed cum.	Per cent.	Re- ported cum.	Ad- justed cum.
64,023	\$4.62	\$4.76	+ 3.2	.19	80.15	87.92	.....	.....	.....	.80	63.95	77.45
41,316	4.94	5.13	+ 3.8	.13	86.96	94.75	.....	.....	.....	.52	78.55	91.09
238,720	4.86	4.97	+ 6.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
25,565	5.16	4.83	+ 6.0	.08	91.84	91.16	.....	.....	.....	.32	88.48	84.53
91,747	4.94	4.31	-10.9	.28	86.83	71.23	.....	.....	.....	1.15	79.70	47.19
19,338	4.67	4.18	-10.6	.06	81.91	64.45	.....	.....	.....	.24	66.66	39.81

It may be repeated that the price-fixing committee gave frank recognition to the fact that a determination to fix prices at the "bulk line" would give the lowest-cost producers enormously large profits. They relied, however, upon the Government getting those profits through the operation of the excess-profits tax. Chairman Brookings gave voice to the sentiment that it made no especial difference to the Government whether these profits were held in check by the committee or taken by tax. A considerable tax upon excess profits was already being collected in 1918, under the revenue act of 1917, upon the incomes of 1917, and one still higher was in prospect for the incomes of 1918.¹

(6) THE INTERPRETATION OF A "REASONABLE PROFIT."

Once the "bulk line" of production had been found and the cost necessary to protect enough producers to supply that amount, the technical difficulties of fixing any price were over. There remained then simply the allowance of a "reasonable" margin for profit above the "bulk-line" cost and the announcement of the price. The "bulk line" for coal, in the Fuel Administration, was located by a committee of technical experts who left, as a matter of policy, the determination of the fixed price above the "bulk line" to the Fuel Administrator in person. The price-fixing committee, which had no such technical assistance, roughly estimated their own "bulk lines" and fixed their own prices after conferences with the industry. The whole body of price-control boards at Washington, either carefully or roughly, figured that the producer should have a "reasonable profit," though they were not in agreement as to what that profit should be.

The President in his address to the mine operators and manufacturers of the United States, on July 12, 1917, had said:

A just price must, of course, be paid for everything the Government buys. By a just price I mean a price which will sustain the industries concerned

¹ See "Price-Fixing as seen by a Price-Fixer," by F. W. Taussig in the Quarterly Journal of Economics, February, 1919.

in a high state of efficiency, provide a living for those who conduct them, enable them to pay good wages, and make possible expansions of their enterprises which will from time to time become necessary as the stupendous undertakings of the great war develop.

It was left to each board, however, to determine upon the interpretation of their general principle and its application to specific controls.

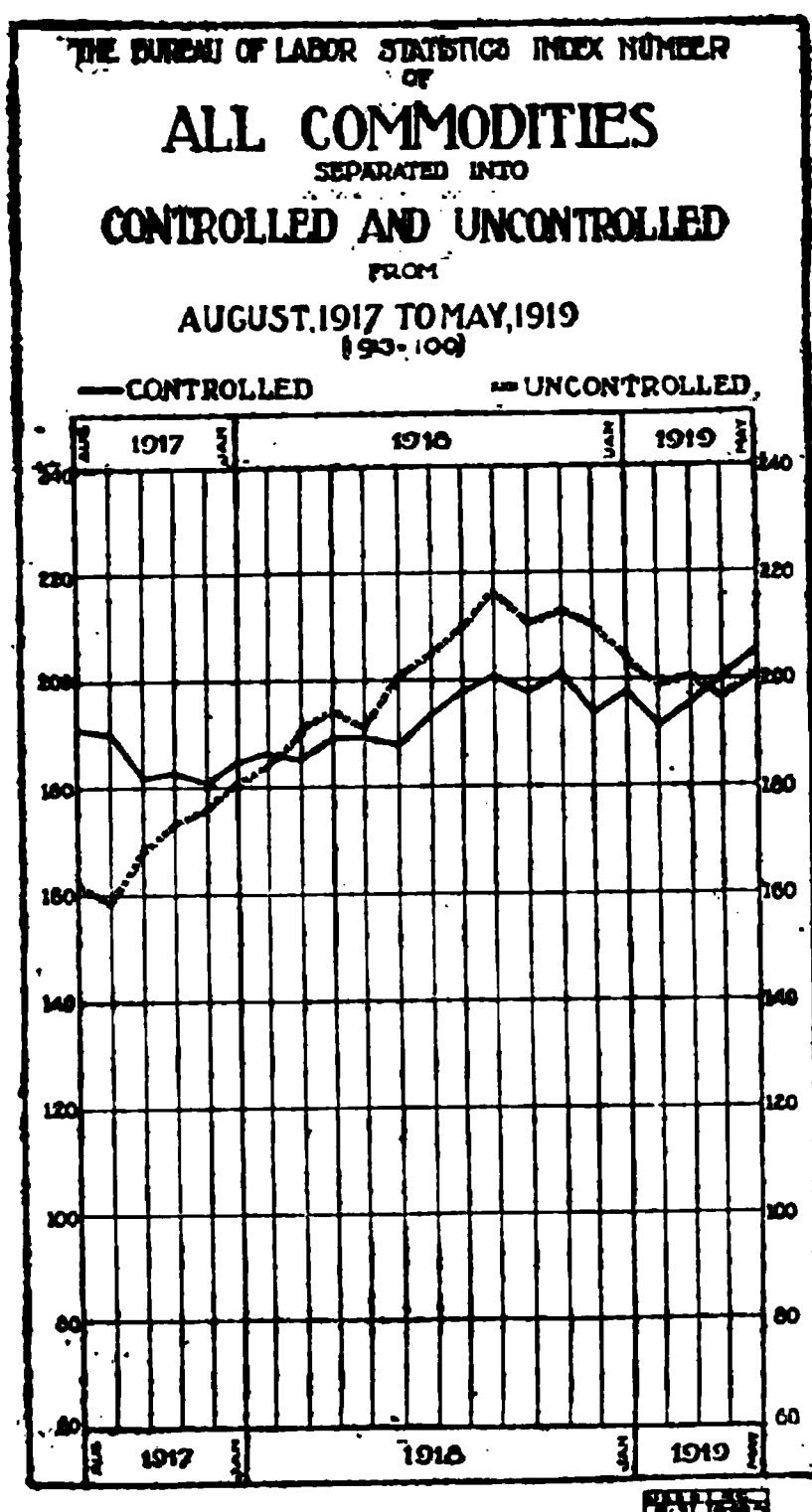
The price-fixing committee tried in a rough way to measure the prewar profits and, with that weapon in hand, they fought in conference for the opportunist policy most favorable to the Government upon which they and the industry could agree. They were compelled, for want of adequate legal powers, to accomplish their ends by resort to indirect methods and did not have the same relative success with all industries. There was not, therefore, established by the price-fixing committee, and given out to the public as their formal policy, any resolute or general rule with respect to what they considered a "reasonable profit." It was, indeed, not possible for them to formulate any such general policy by reason of various complications within certain industries. It has already been noted, for example, that the difficulties of negotiation made finally mandatory the approval of particular cotton-goods prices at figures more than 25 per cent above cost.

A considerable emphasis has already been given to the noteworthy work done by the Food Administration with respect to determining their "reasonable margin of profit." Mr. Herbert Hoover said over and over again that no person was entitled to make more profit from any employment than he could have made under prewar conditions. He did not interpret this policy to mean, of course, that no licensee could charge more than a prewar price. The administration of his general policy gave form to three important aspects of rule: That the "reasonable margin of profit" must be figured upon a cost basis, the fixing of maximum margins of profit above that basis, and the disregard of replacement value in fixing margins.

12. THE LIFTING OF GOVERNMENT CONTROL OVER PRICES.

The Government began lifting its war-time control over prices immediately after the signing of the armistice, and had, in fact, virtually restored prices to free competition by the end of 1918. Some controls were continued a short while beyond November 11, 1918, at requests from the industries to allow for gradual readjustment, or where it was required that particular transactions already underway be completed.

The War Industries Board told its commodity chiefs after the armistice was signed that the war was over, and repeatedly refused to enter into new regulations. It closed its doors to new business officially on December 31, 1918. The price-fixing committee refused numerous requests to continue price fixing, in the main, and disbanded on March 1, 1919. The Fuel Administration relinquished its control over fuels and closed officially all price control on January 31, 1919. The Food Administration, though obliged to continue certain controls, such as wheat and sugar, lifted most of its regulations soon after the armistice. The War Trade Board continued its license control over exports and imports somewhat longer than other boards continued price control, but closed its official work on June 30, 1919, and went into the State Department for liquidation.



The Bureau of Labor Statistics index numbers. — "All commodities" separated into controlled and uncontrolled. — By months, August, 1917, to May, 1919 (1913=100).

(1) THE EFFECT OF LIFTING CONTROL UPON PRICES.

It is of especial significance, since most of the Government regulations over prices had been lifted by January 1, 1919, to inquire

what then happened to prices. A succinct presentation of the effects of lifting control upon the "All Commodities" index number of the Bureau of Labor Statistics is given here. There follows a separation, extending from August, 1917, when control began, to May, 1919, of the series carried by the Bureau of Labor Statistics into controlled and uncontrolled commodities.¹ Beginning with August, 1917, all commodities carried by the Bureau of Labor Statistics were divided into two groups—one of commodities over which price control was exercised at some time during the war, and one of those over which no control was exercised. An index number for August, 1917, was figured for each series on a 1913 base, and subsequently the per cent of change each month from the preceding month was found and multiplied by the index number for the month used as a base. Thus, two new index numbers, one for controlled and one for uncontrolled commodities, were made from the Bureau of Labor Statistics "All Commodities" index number, and by the same method. The fact that the Bureau of Labor Statistics index number in July, 1917, was 185, and that the new controlled index number for August stood at 191 and the uncontrolled at 162, does not, of course, mean that controlled prices rose that month or that uncontrolled prices fell.

The behavior of the index number of controlled commodities, after control had been lifted in January, 1919, would seem to indicate that regulation had held it in check. Once the regulations were removed, and in spite of the fact that war pressure had ceased, the index started upward and continued rising throughout the spring. The index number of uncontrolled commodities, which showed less stability during the war, underwent no such fluctuation or rise during the first half of 1919 as characterized the controlled index. There were so many new influences tending to determine the course of prices after control was lifted that no further generalization upon the effectiveness of war-time regulation can here be made.

¹ The basis for determining which commodities were controlled and which were uncontrolled was precisely that used in the making of controlled and uncontrolled indexes from the price section index number. It is easily possible, therefore, to check the commodities carried by the Bureau of Labor Statistics against the list of commodities counted as controlled and uncontrolled in the following chapter and discover the separation that is made here.

THE BUREAU OF LABOR STATISTICS INDEX NUMBERS OF "ALL COMMODITIES " SEPARATED INTO CONTROLLED AND UNCONTROLLED COMMODITIES FROM JANUARY, 1914, TO MAY, 1919.

[1913=100.]

		Uncontrolled January, 1914, to August, 1917.			
		1914	1915	1916	1917
January.....		100	98	110	150
February.....		99	100	111	155
March.....		99	99	114	160
April.....		98	99	116	171
May.....		98	100	118	181
June.....		98	99	118	184
July.....		99	101	119	185
August.....		102	100	123	184
September.....		103	98	127	.....
October.....		99	101	133	.....
November.....		98	102	143	.....
December.....		97	105	146	.....

	1917		1918		1919	
	Con-trolled.	Uncon-trolled.	Con-trolled.	Uncon-trolled.	Con-trolled.	Uncon-trolled.
January.....			185	182	198	204
February.....			186	184	192	200
March.....			185	190	197	201
April.....			189	194	202	197
May.....			189	192	205	202
June.....			188	201	.....	.....
July.....			194	205	.....	.....
August.....	191	162	198	209	.....	.....
September.....	189	158	201	216	.....	.....
October.....	182	168	198	211	.....	.....
November.....	183	173	201	213	.....	.....
December.....	181	176	194	211	.....	.....

(2) THE PURPOSE OF THE INDUSTRIAL CONFERENCE BOARD.

Considerable anxiety arose within the Government and out, following the lifting of war-time control over prices, lest prices become unstable while readjusting themselves to peace-time conditions. The informal discussion held at Washington between high officials following the signing of the armistice developed a belief that the agreements relied upon during the war to hold prices down could be modified to meet the peace-time situation. The Cabinet was called into special meeting on February 5, 1919, and made plans for the creation of an industrial board.

The industrial board, under the plan approved by the President, was to meet the representatives of industry and determine with them "fair prices " for the basic raw materials. These prices, it was thought, could be found by a study of cost and marketing data and could be agreed upon as during war time without resort to compulsion. The personnel of the new board was announced by the Secretary of Commerce on March 10, 1919, and its seven members began work immediately.

The new board held numerous conferences during March with representatives of the more important industries and discussed the lowering of prices. In several cases agreements were reached and the agreed "fair prices" announced.

The strength of the board lay in part in the hope that it and officials of the Government responsible for large purchases might work in absolute understanding. But on April 1, 1919, there arose a serious difficulty in the refusal of the Railroad Administration to accept the "agreed upon" prices set by the board for steel rails. There seemed no way of reaching an agreement between the Railroad Administration and the industrial board. The Attorney General announced, as his opinion, that the plan developed had no legal authority. The difficulties of various kinds, aggravated by the lack of statutory power, accumulated and the members of the board resigned as of May 12, 1919. The informal method of fixing prices had not proved as efficacious in peace time as during war.


PART III.

STATISTICAL DEVICES FOR MEASURING THE EFFECTS OF PRICE CONTROL.

INTRODUCTION.

A study of the extraordinary heights to which prices rose by August, 1917, and of the actions then begun by the Government to arrest them, prompts the inquiry how those actions affected prices. The search for a full answer leads into wide fields of study, depending upon the individual urge, and leaves the investigator at last with little more than opinion. Men differ in the objective points by which they judge whether price control was effective, and seek nothing so much as facts with which to support their own theories. This monograph nowhere ventures to establish or contest any theory of Government regulation. It presents simply the pertinent facts. There have been set up in the present chapter various statistical devices with which each person may for himself measure the effects of Government price control.

It should be understood at the outset that no one can hope ever to measure precisely the effects of price control upon the general level of prices. The better price index numbers of commodities at wholesale, made from selected samples which are weighted to allow each commodity its proper influence upon the index, give an accurate enough record of the general price level. They show how wholesale prices actually moved during the war. But it can not be said, of course, to what further heights the prices would have carried these index numbers had there been no Government interference. It is possible only to look backward and analyze what did happen. The most useful analysis for students anxious to know the effects of control is had by separating the controlled and uncontrolled commodities in a general index number of prices and recomputing new indexes for each. The resulting devices make reliable measures of past relative rises of controlled and uncontrolled prices and at least suggest probable rises under free competition.



There have been made, and put into this chapter for each student to use as he will, the following statistical devices for measuring the effects of price control: A tabulation of the commodities controlled and uncontrolled each month showing the gradual extension of control by an arrangement of the series in the Price Section index number; index numbers of controlled and uncontrolled prices for "all commodities," the 7 major groups and the 50 subclasses, running by months from 1913 to 1918, and showing their relative movements away from prewar levels; chain indexes of controlled and uncontrolled prices for "all commodities," 7 major groups and selected subclasses, running by months from April, 1917, to the end of 1918, and showing in each month the rise or fall from the month preceding; the relative points below which 50 selected basic commodities were pegged; a comparison of controlled raw-material prices with their uncontrolled manufactures; a comparison of controlled prices of manufactured goods with their uncontrolled raw materials; a comparison of controlled raw material prices with their controlled manufactures; a comparison of controlled wholesale prices with corresponding controlled retail prices; and finally a comparison of war prices in the United States, England, France, and Canada.

1. THE GRADUAL EXTENSION OF PRICE CONTROL.

It is of value, before attempting any measure of the effects of price control, to note the extent to which the Government brought commodities under control. An analysis of the 1,366 typical commodities at wholesale, which are included in the Price Section index number, shows that in September, 1917, only 3.66 per cent of them were controlled and the remaining 96.34 per cent uncontrolled. But by the time the armistice was signed the Government had brought 41.95 per cent of these commodities under price control, while 58.05 per cent of them were still uncontrolled. The table which follows shows the commodities that were brought under control each month during the war and the rate at which the list of controlled commodities increased and that of uncontrolled commodities decreased.

"ALL COMMODITIES."

(1366 series—100 per cent.)

Control began.	Commodities.	Number of series.		Percentage of series.	
		Con- trolled.	Uncon- trolled.	Con- trolled.	Uncon- trolled.
1917.					
September.....	Coal, coke, copper, wheat, iron ore, pig iron, steel bars, steel shapes, steel plates.....	50	1316	3.66	96.34
October.....	Steel blooms and billets, sheet bars, wire rods, skelp, sugar.....	66	1300	4.83	95.17
November.....	Steel sheets, pipe, steel scrap, tinplate, lead, corn, oats, barley, fresh fruits and vegetables, live stock, poultry, fish, vegetable oils, southern or yellow pine, ammonia, smokeless cannon powder.....	266	1100	19.47	80.53
December.....	Douglas fir, wood chemicals, Portland cement, remainder of iron and steel class.....	294	1072	21.54	78.46
1918.					
January.....	Nitrate of soda, fertilizers, except sulphur and sulphuric acid.....	318	1048	23.28	76.72
February.....	Zinc, formaldehyde, toluol, arsenic, animal feeds, coffee.....	352	1014	25.77	74.23
March.....	Aluminum, binder twine, manila fiber.....	362	1004	26.50	73.50
April.....	Spruce, hemlock, nickel, quicksilver, silver, paper, caustic soda, soda ash, bleaching powder, carbon, tetrachloride.....	387	979	28.34	71.66
May.....	Wool, hides and skins, rubber, platinum, manganese, cotton, linters, quebracho.....	469	897	34.33	65.67
June.....	Sulphuric and nitric acids, sulphur, harness leather.....	481	885	35.22	64.78
July.....	Cotton goods and cotton yarns, brick, building tile, sand and gravel, crushed stone.....	545	821	60.10	39.90
August.....	Woolen rags, glycerin, sole and belting leather, crude petroleum, kapoc.....	570	796	41.73	58.27
September.....	Silk waste.....	572	794	41.87	58.13
October.....	Burlap.....	573	793	41.95	58.05
November.....		573	793	41.95	58.05
December.....		573	793	41.95	58.05

The queries which press most persistently, on one seeking to measure effects of price control, are whether the commodities that were brought finally under regulation had risen relatively higher than others, whether the controlled commodities afterwards became more stable than the uncontrolled, and, finally, to what heights prices were allowed to rise before the Government began regulating them. These moot points can scarcely be settled in a manner that will permit of generalization upon the effects of control as a whole, except by the construction of a weighted index number for commodities that came under control some time during the war and another for those which did not. It is true that none of the commodities in such a controlled list would have come under price control before the summer of 1917, and some of them not until 1918. But, if one object of the inquiry is to determine whether the precontrol rises of commodities afterwards controlled were more threatening than rises of other commodities, this is the proper method to pursue. The index numbers presented here by months from January, 1913, to December, 1918, are not then strictly speaking for controlled and uncontrolled commodities as it is proposed to call them. They are, more specifically, an index number of representative commodities which were brought under price control some time before the signing of the armistice and an index number of other commodities equally representative which were not.

2. THE PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES.

The index number of wholesale prices made by the Price Section of the War Industries Board is, by all odds, the most comprehensive and best device for measuring war prices that has been used in this country. This index number contained prices for 1,366 of the most important individual commodities that were dealt in at wholesale during the war, classified into 7 major groups and 50 subclasses.

These 1,366 commodities, for which the index number contains monthly, quarterly, and yearly prices from January, 1913, to December, 1918, fall under one or another of the following 7 groups and 50 classes:

I. FOOD GROUP.

1. Feed and forage.
2. Wheat and wheat products.
3. Corn and corn products.
4. Oats, rice, buckwheat, and their products.
5. Barley, hops, rye, and their products.
6. Sugar and related products.
7. Vegetables and truck.
8. Edible vegetable oils.
9. Fruits, nuts, and wine.
10. Spices and condiments.
11. Tea, coffee, and cocoa.
12. Tobacco and tobacco products.
13. Live stock, meats, and fats.
14. Poultry and dairy products.
15. Fish and oysters.

II. CLOTHING GROUP.

16. Cotton and cotton products.
17. Wool and wool products.
18. Silk and silk products.
19. Hides and skins and their products.
20. Hatters' fur and fur felt hats.
21. Hair, bristles, and feathers.
22. Buttons.

III. RUBBER, PAPER, AND FIBERS GROUP.

23. Rubber and rubber products.
24. Paper.
25. Fibers and fiber products.

IV. METALS GROUP.

26. Iron, steel, and their products.
27. Ferroalloys, nonferrous and rare metals,

V. FUELS GROUP.

28. Coal and coke.
29. Petroleum and its products.
30. Matches.

VI. BUILDING MATERIALS GROUP.

31. Clay products.
32. Sand and gravel.
33. Quarry products.
34. Cement.
35. Glass.
36. Lumber.
37. Paints and varnishes.

VII. CHEMICALS GROUP.

38. Mineral acids.
39. Heavy chemicals.
40. Miscellaneous inorganic chemicals.
41. Fertilizers.
42. Soaps and glycerin.
43. Essential oils, flavoring, and perfumery materials.
44. Wood distillation products and naval stores.
45. Natural dyestuffs and tanning chemicals.
46. Coal-tar crudes, intermediates, and dyes.
47. Drugs and pharmaceuticals.
48. Proprietary preparations.
49. Explosives.
50. Miscellaneous organic chemicals.

The price series were, so to speak, laid upon a table and separated into those which some time came under price control and those which did not. The field of prices formally or informally controlled by the Government is infinitely wider and more indefinite than that covering simply the prices fixed. But an adequate measurement, covering all price regulations undertaken by the Government, requires that the broader interpretation of control be chosen. There was involved, therefore, considerable arbitrary judgment in determining whether certain prices were controlled. The use of the word control at any rate is consistent throughout this inquiry and it is doubtful whether the few exceptions which may be taken to the division made would materially affect the result. The 1,366 commodities were, as indicated, then separated into 573 controlled and 793 uncontrolled commodities.

(1) TABLES OF INDEX NUMBERS OF PRICES OF CONTROLLED AND UNCONTROLLED COMMODITIES.

These 573 series of controlled wholesale prices and the 793 series of those uncontrolled, after classification under their proper groups and subclasses, were weighted by multiplying each individual series by the quantity of its 1917 production plus imports. That operation, designed to assign each commodity an influence upon the final index in proportion to its importance, gave 12 monthly, 4 quarterly and 1 yearly aggregate for each of the 1,366 series for each of the 6 years. These aggregates were then turned into relatives by allowing the average prewar aggregate (July 1, 1913, to June 30, 1914,) to equal 100. There was thus made an index number for controlled and another for uncontrolled prices upon a prewar base. The slight discrepancy between the Price Section "all commodities" index number listed here as "all," and the controlled and uncontrolled indexes occurs because class weights were not used in making the latter.¹

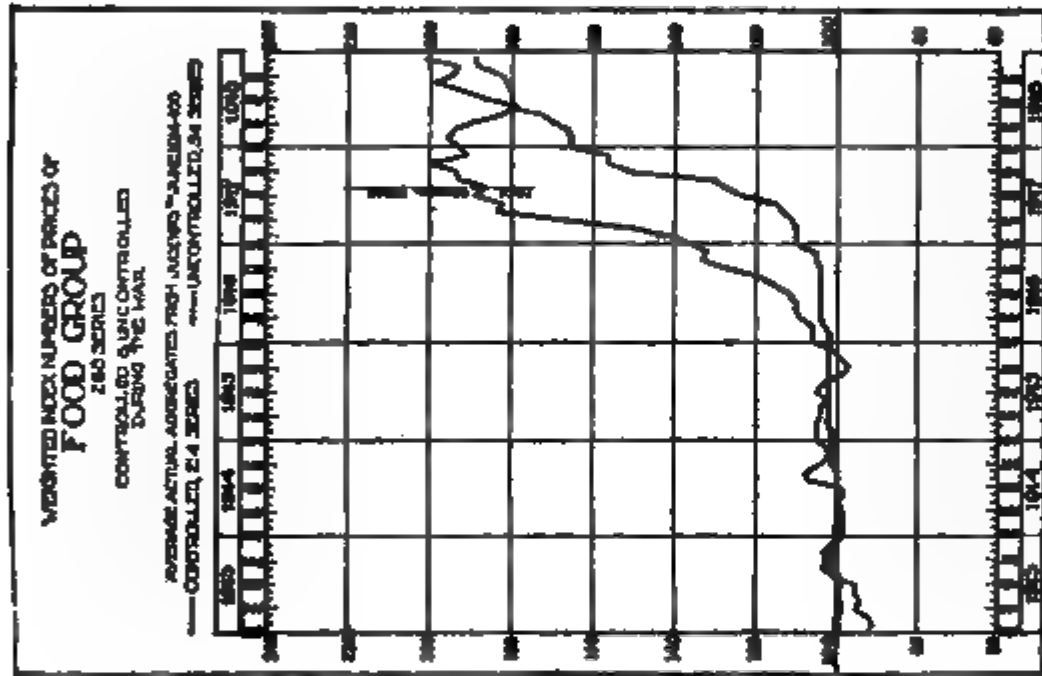
It is of especial significance that the 573 series of the "all commodities" index, which the Government finally put under control, had risen much higher when control began than the remaining 793 uncontrolled series. Indeed, just before the Government began control of them the index of these so-called controlled series reached 209, while the index for the uncontrolled series during the same month was only 160. But immediately after the beginning of control the index for the controlled series began to drop until by June, 1918, it was down to 189. The index of the uncontrolled series, on the other hand, continued steadily upward until October, 1918, when it reached 201. The controlled series likewise rose after June but never again reached the higher point to which they had climbed before control began.

¹ On the use of class weights, see War Industries Board Price Bulletin No. 1, "Summary," by Wesley C. Mitchell.

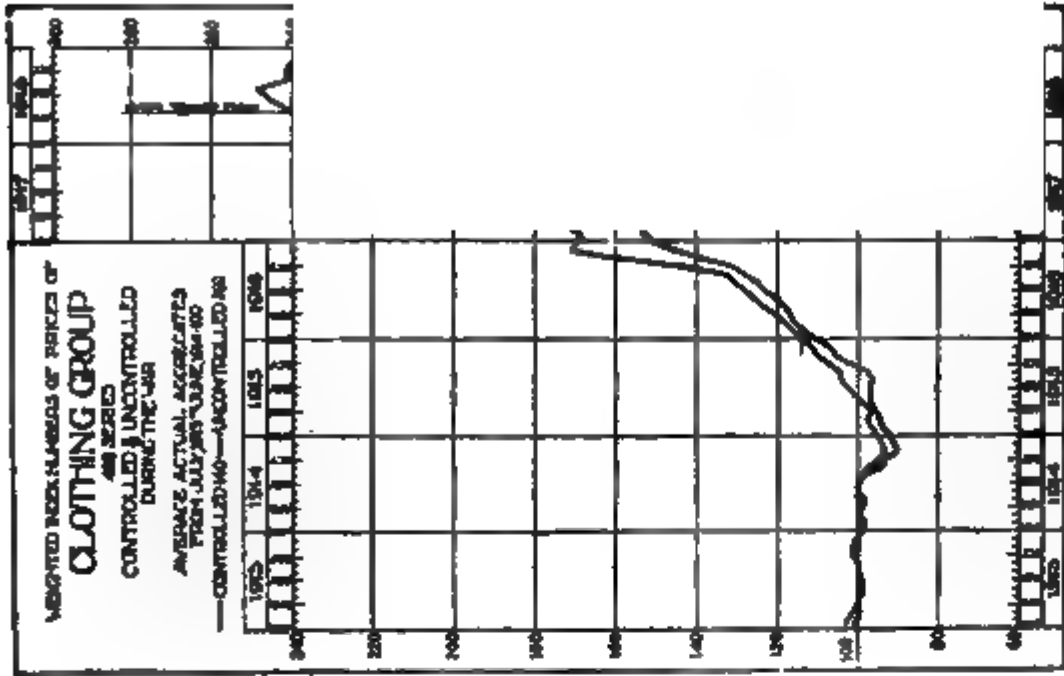
The food prices that came finally under control during the war had risen to 194 when price control really set in, while the uncontrolled lot during that month had risen only to 150. The controlled food prices, which reached a peak of 200 in November, 1917, began dropping as control was extended until they were as low as 179 in June, 1918. They then started upward again during the latter half of 1918. The uncontrolled food prices, while at a lower level when food control set in, continued rising during the whole time that the controlled food prices were falling. Control within the clothing group began relatively late and the behavior of the controlled and uncontrolled indexes is not greatly different. The effect of the controlled wool prices upon their uncontrolled manufactures, and that of controlled cotton manufactures upon their raw material are studies, of course, which can be made only by use of the class indexes for wool and cotton. The effect of control within the rubber, paper, and fiber group does not show in the controlled index until during the latter half of 1918. There are few groups in which the effect of control upon market prices shows so immediately and clearly as in metals. The index of metals which the Government finally controlled reached an extraordinary peak of 350 in July, 1917, when talk of regulation began. The other metals, which never did come under control, had risen only to 205 in that month. Metal prices started downward before actual Government regulation began, and were brought by regulation down to 212 by November, 1917. It is noteworthy that the index of controlled metals was held within a few points of that stable level throughout the war. The rise within the controlled fuels, following Government regulation of coal, would seem to indicate that coal control did not hold prices down. The rise, however, is explained in a large way by increases which were from time to time allowed by the Fuel Administration. It is difficult to measure the effects of control within the building materials group because of the somewhat similar behavior of the controlled and uncontrolled groups, and the fact that building materials prices were so largely influenced by war buying. The controlled series within the chemical group began a decline in April, 1918, which continued throughout the year. They had fallen from 224 in April to 174 by December. The uncontrolled series during the same months rose gradually.



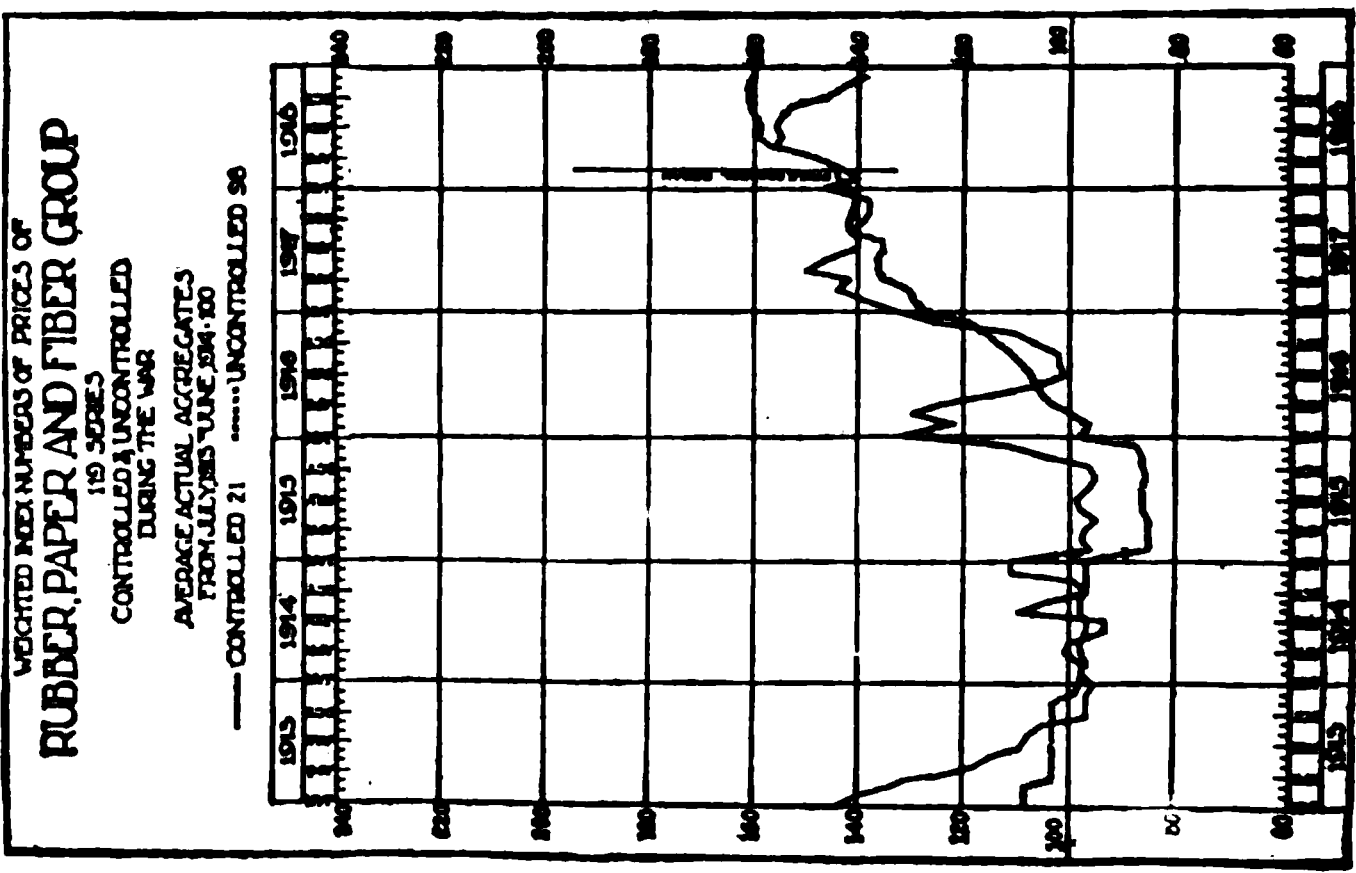
Weighted index numbers of prices.—"All commodities" (1,366 series) controlled and uncontrolled during the war. By months, January, 1913, to December, 1918. (Average actual aggregates, July, 1913, to June, 1914—100.) (Controlled, 573 series; uncontrolled, 783 series.)



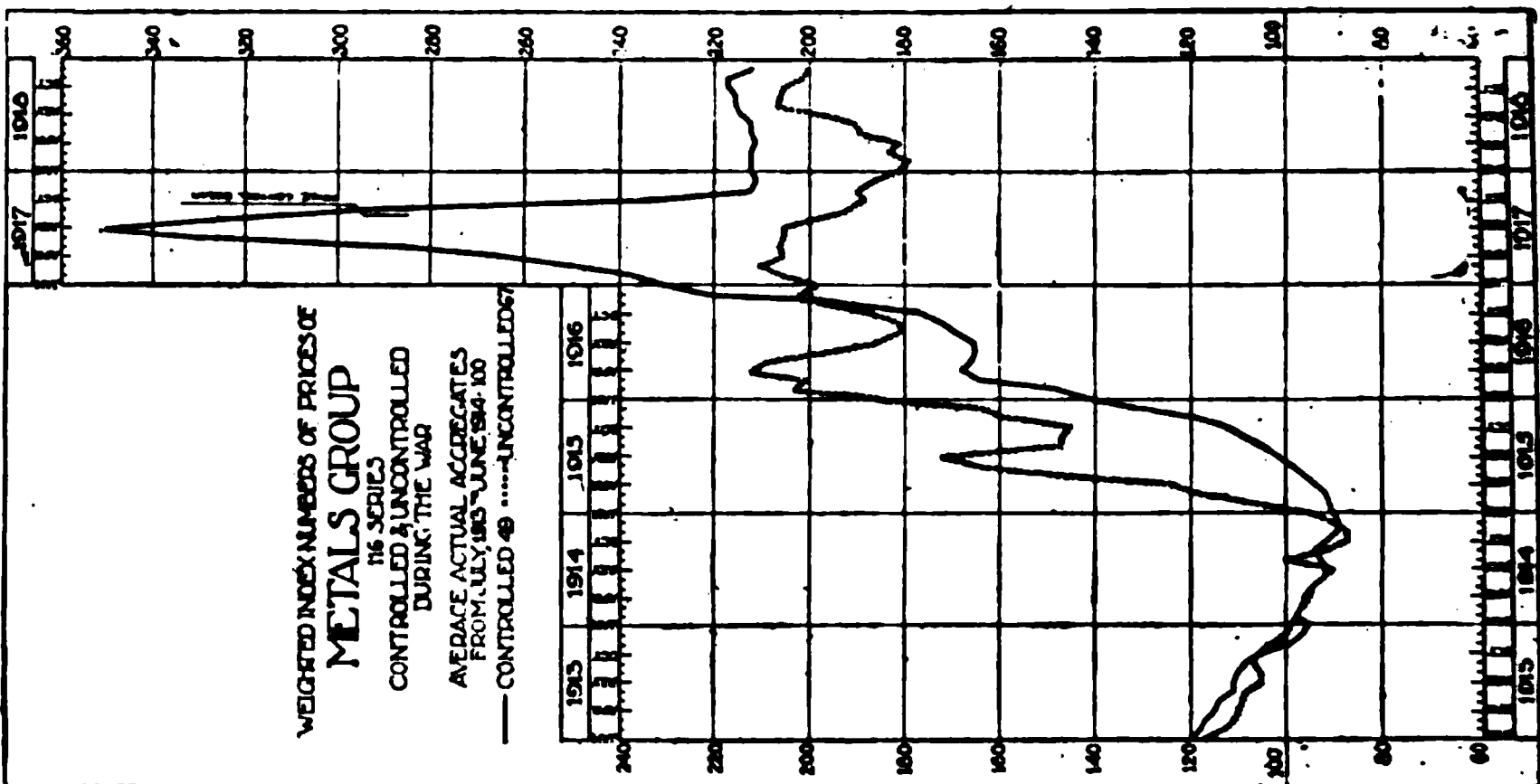
Weighted index numbers of prices.—Food group (240 series) controlled and uncontrolled during the war. (Average actual aggregates, July, 1913, to June, 1914—100.) (Controlled, 214 series; uncontrolled, 54 series.)



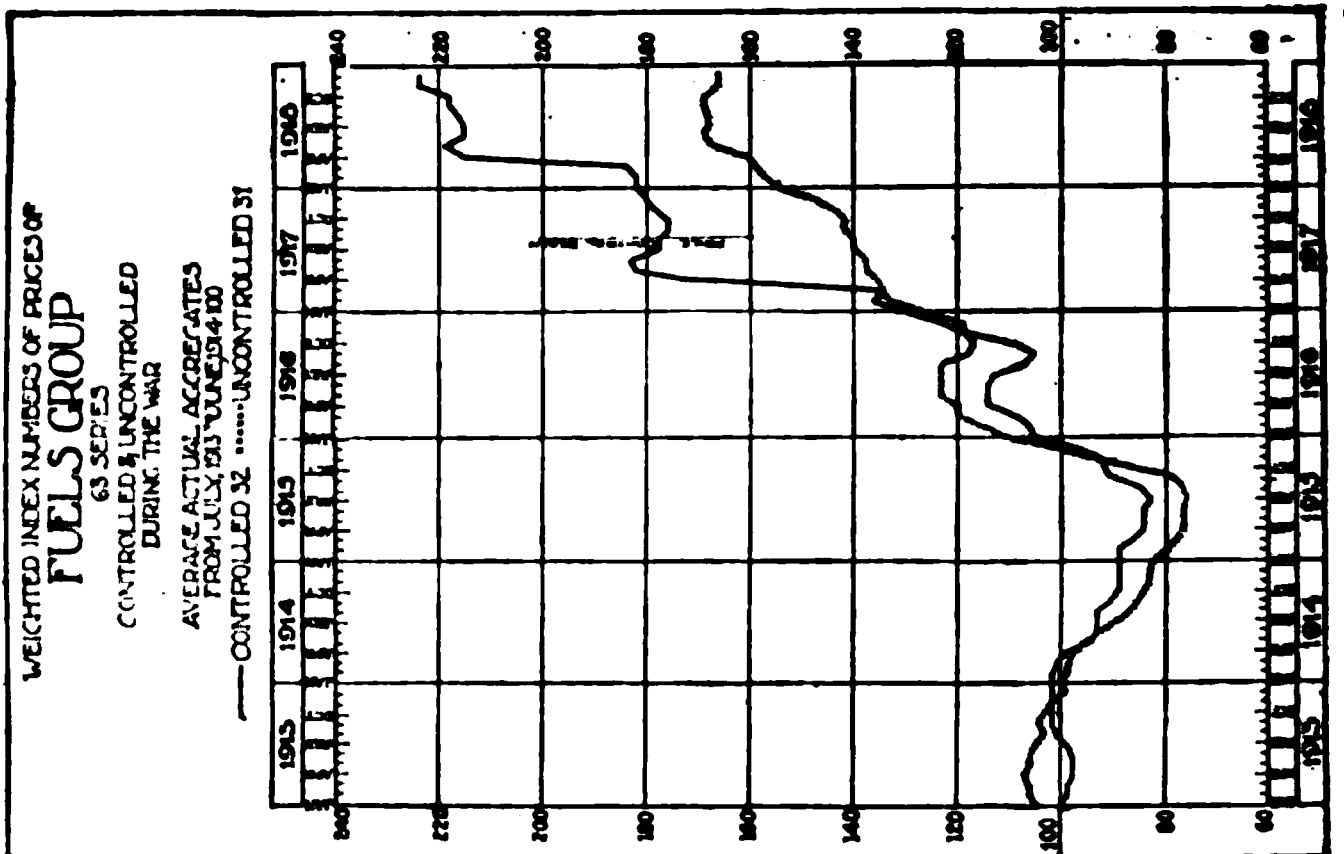
Weighted index numbers of prices.—Clothing group (400 series) controlled and uncontrolled during the war. (Average actual aggregates, July, 1913, to June, 1914—100.) (Controlled, 140 series; uncontrolled, 260 series.)



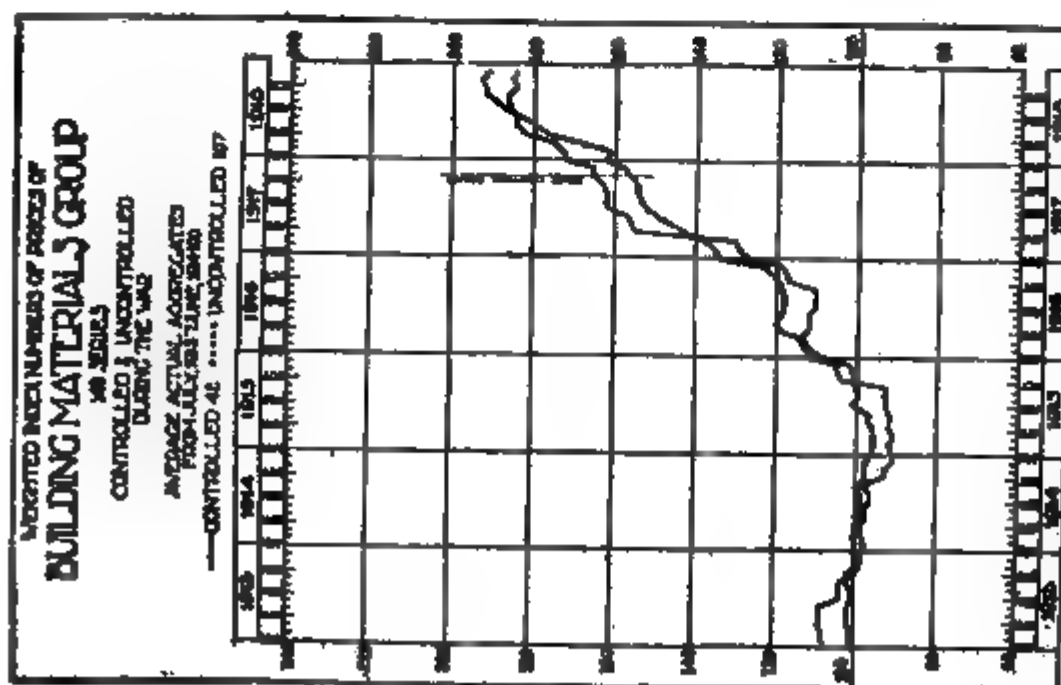
Weighted index numbers of prices.—Rubber, paper and fiber group (119 series) controlled and uncontrolled during the war. (Average actual aggregates July, 1913, to June, 1914 = 100.) (Controlled, 21 series; uncontrolled, 96 series.)



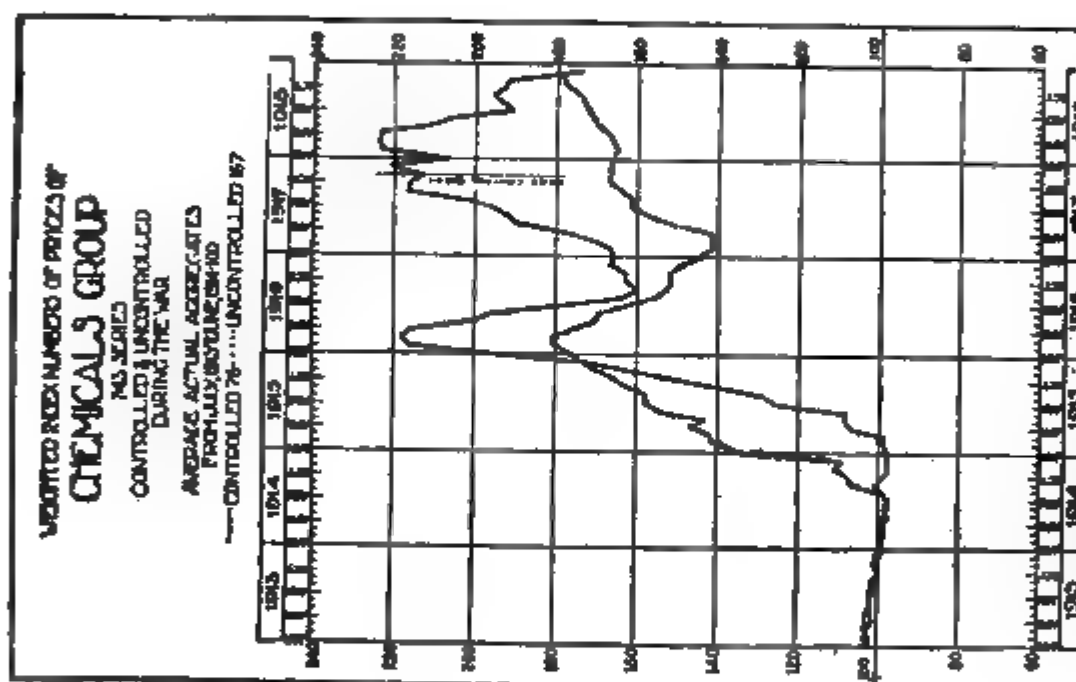
Weighted index numbers of prices.—Metals group (116 series) controlled and uncontrolled during the war. (Average actual aggregates July, 1913, to June, 1914 = 100.) (Controlled, 49 series; uncontrolled, 67 series.)



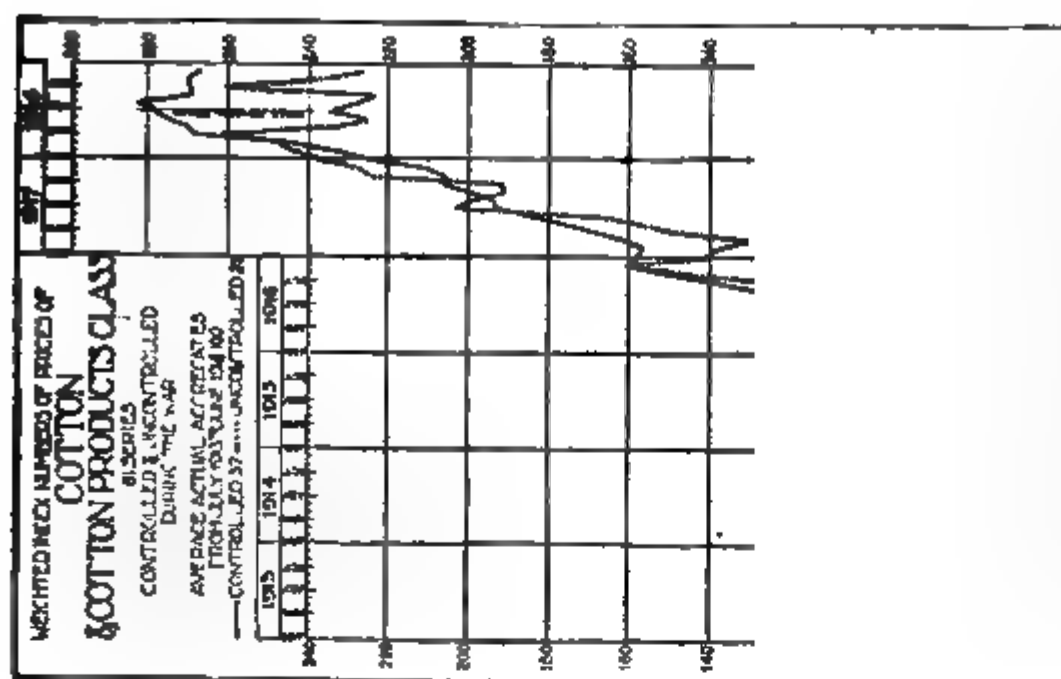
Weighted index numbers of prices.—Fuels group (63 series) controlled and uncontrolled during the war. (Average actual aggregates July, 1913, to June, 1914 = 100.) (Controlled, 32 series; uncontrolled, 31 series.)



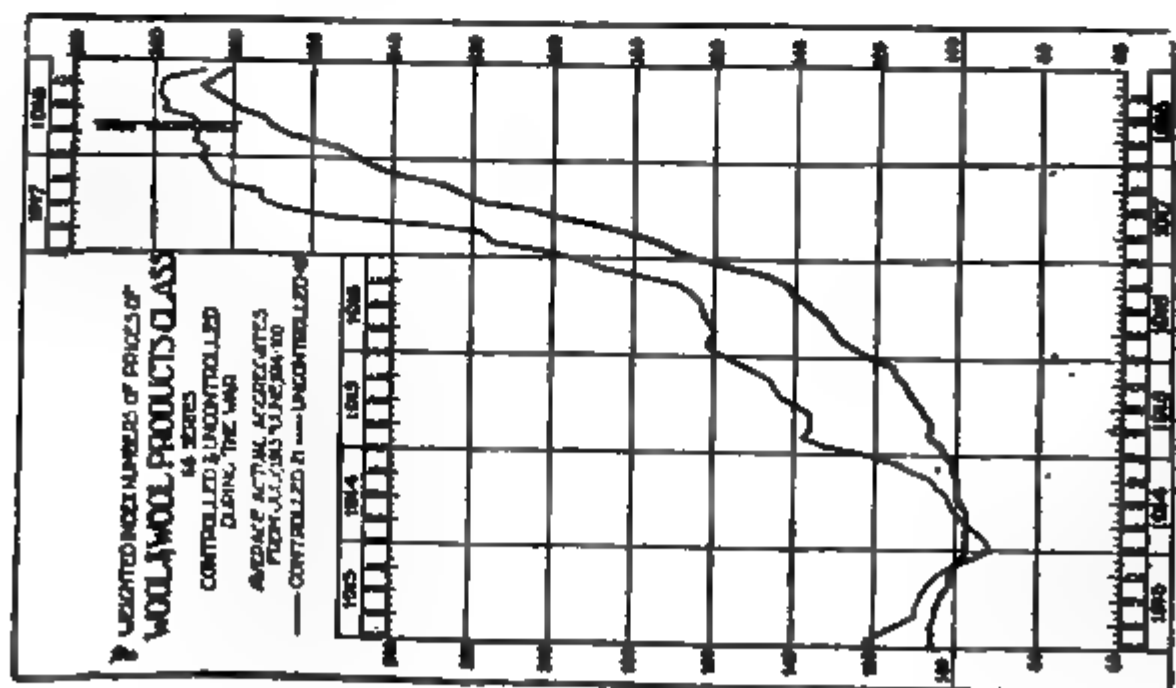
Weighted index numbers of prices.—Building Materials group (149 series) controlled and uncontrolled during the war (Average actual aggregates, July, 1913, to June, 1914—100.) (Controlled, 48 series; uncontrolled, 107 series.)



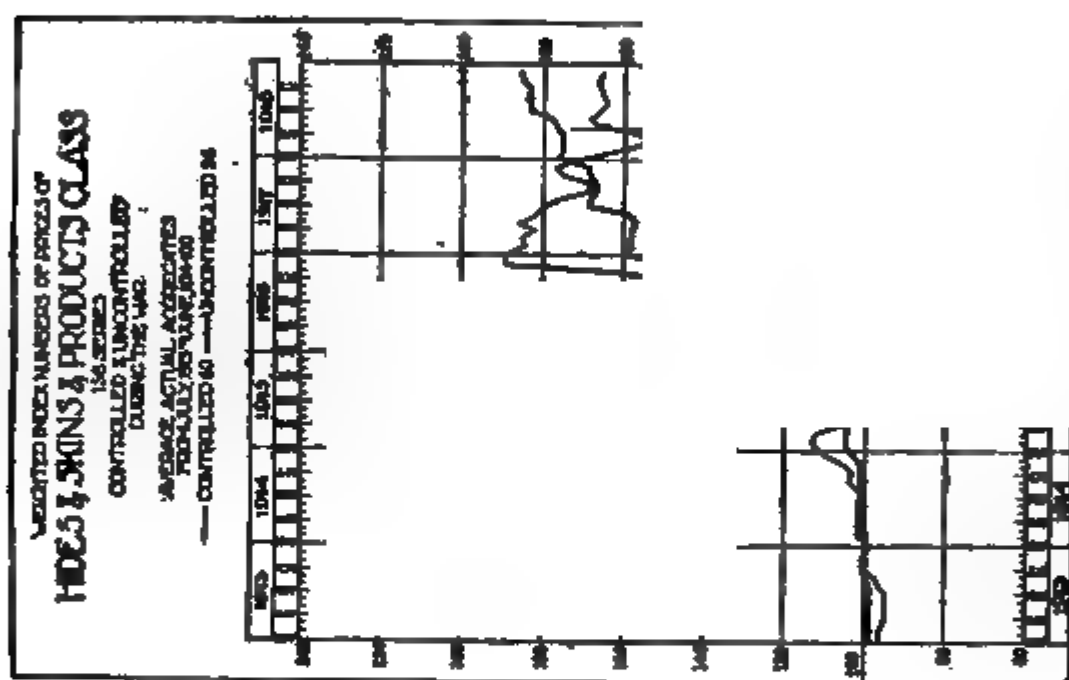
Weighted index numbers of prices.—Chemicals group (243 series) controlled and uncontrolled during the war (Average actual aggregates, July, 1913, to June, 1914—100.) (Controlled, 76 series; uncontrolled, 167 series.)



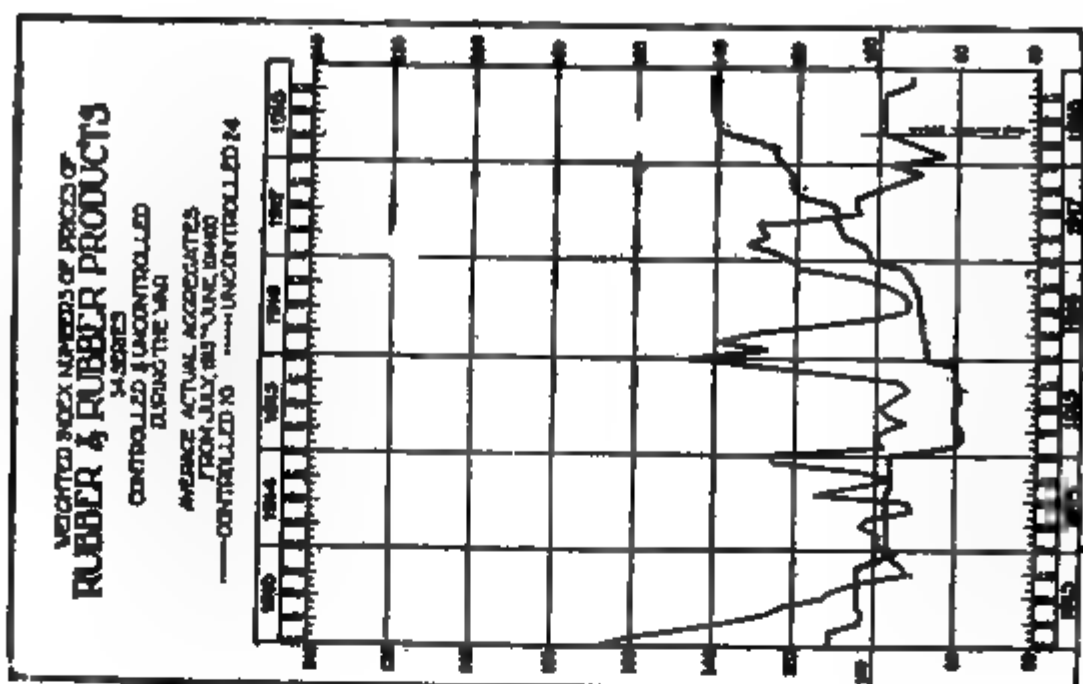
Weighted index numbers of prices.—Cotton and cotton products class (81 series) controlled and uncontrolled during the war (Average actual aggregates, July, 1913, to June, 1914—100.) (Controlled, 57 series; uncontrolled, 24 series.)



Weighted index numbers of prices.—Wool and wool products class (14 series) controlled and uncontrolled during the war. (Average actual aggregates, July, 1913, to June, 1914—100.) (Controlled, 21 series; uncontrolled, 45 series.)

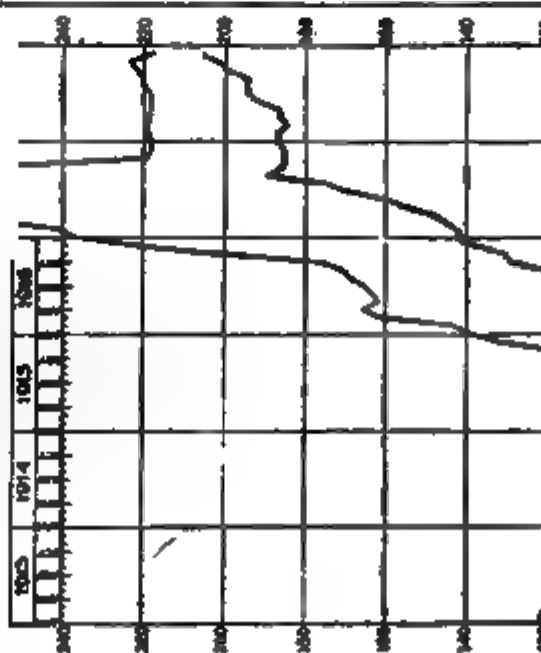


Weighted index numbers of prices.—Hides and skins, leather and leather manufactures class (154 series) controlled and uncontrolled during the war. (Average actual aggregates, July, 1913, to June, 1914—100.) (Controlled, 60 series; uncontrolled, 96 series.)



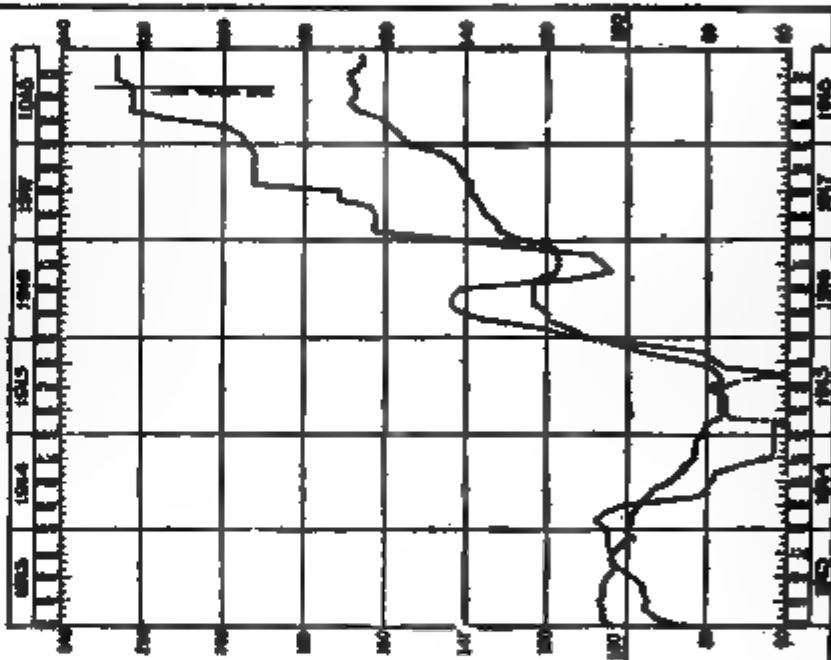
Weighted index numbers of prices.—Rubber and rubber products (34 series) controlled and uncontrolled during the war. (Average actual aggregates, July, 1913, to June, 1914—100.) (Controlled, 10 series; uncontrolled, 24 series.)

WEIGHTED INDEX NUMBERS OF PRICES OF
IRON & STEEL
& THEIR PRODUCTS
AS SERIES
CONTROLLED & UNCONTROLLED
DURING THE WAR
AVERAGE ACTUAL AGGREGATES
FROM JULY 1913 TO JUNE 1914
--- CONTROLLED 85 --- UNCONTROLLED 82



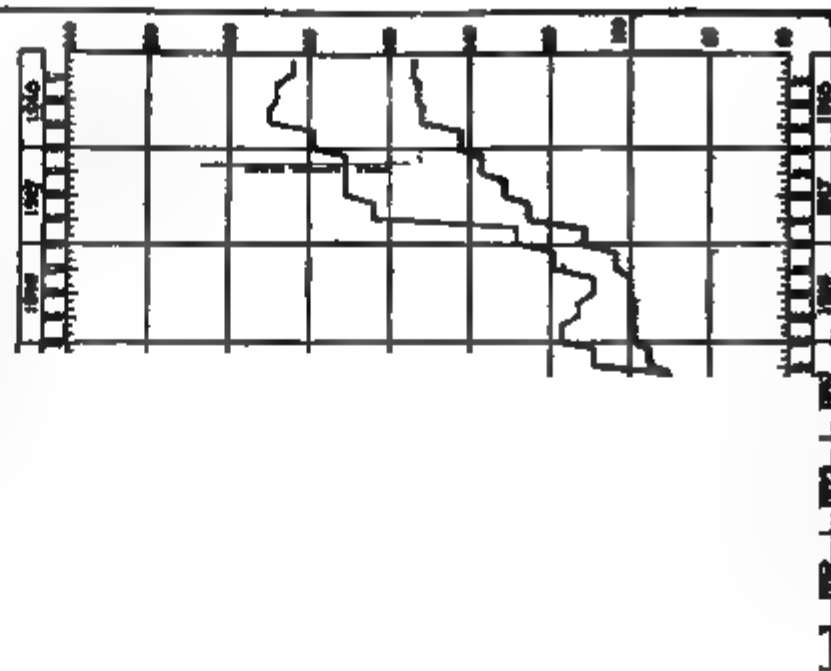
Weighted index numbers of prices.—Iron and steel and their products (88 series) controlled and uncontrolled during the war. (Average actual aggregate July 1913 to June 1914—100.) (Controlled

WEIGHTED INDEX NUMBERS OF PRICES OF
PETROLEUM & PETROLEUM PRODUCTS
AS SERIES
CONTROLLED & UNCONTROLLED
DURING THE WAR
AVERAGE ACTUAL AGGREGATES
FROM JULY 1913 TO JUNE 1914
--- CONTROLLED 87 --- UNCONTROLLED 82



Weighted index numbers of prices.—Petroleum and petroleum products (37 series) controlled and uncontrolled during the war. (Average actual aggregate July 1913 to June 1914—100.) (Controlled

WEIGHTED INDEX NUMBERS OF PRICES OF
LUMBER
AS SERIES
CONTROLLED & UNCONTROLLED
DURING THE WAR
AVERAGE ACTUAL AGGREGATES
FROM JULY 1913 TO JUNE 1914
--- CONTROLLED 86 --- UNCONTROLLED 82



Weighted index numbers of prices.—Lumber (82 series) controlled and uncontrolled during the war. (Average actual aggregate, July, 1913, to June, 1914—100.) (Controlled

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base average prices July, 1913, to June, 1914—100.]

	All commodities.			Food group.			Clothing group.		
	Con- trolled. (573)	Uncon- trolled. (793)	All. (1,366)	Con- trolled. (214)	Uncon- trolled. (54)	All. (268)	Con- trolled. (140)	Uncon- trolled. (269)	All. (409)
1913—Months—									
January.....	98	103	103	92	100	98	103	101	102
February.....	97	103	102	91	100	96	103	101	102
March.....	98	103	102	92	100	97	102	100	101
April.....	99	102	101	95	99	97	101	100	100
May.....	98	101	100	94	99	95	100	100	100
June.....	98	101	100	95	100	96	99	100	99
July.....	98	101	100	95	99	96	99	100	99
August.....	102	101	101	100	99	100	100	100	100
September.....	103	102	102	103	101	102	100	100	100
October.....	102	102	102	102	101	102	102	102	103
November.....	102	102	102	103	101	103	102	101	102
December.....	101	100	101	101	101	102	101	100	100
Quarters—									
First.....	97	103	102	92	100	97	102	101	101
Second.....	98	101	100	94	99	96	100	100	100
Third.....	101	101	101	100	100	99	100	100	100
Fourth.....	102	101	102	102	101	103	101	101	101
Year.....	100	102	101	97	100	99	101	100	101
1914—Months—									
January.....	99	99	100	99	100	101	99	99	99
February.....	99	99	100	99	99	101	100	99	99
March.....	99	99	99	99	99	100	100	100	100
April.....	99	99	98	99	100	98	99	99	99
May.....	99	98	97	100	100	98	100	99	99
June.....	98	99	97	99	100	97	100	100	100
July.....	98	98	97	99	100	98	100	100	100
August.....	104	98	101	107	100	105	99	100	99
September.....	105	98	101	108	100	107	98	94	94
October.....	101	95	99	104	101	104	95	93	91
November.....	99	94	98	102	101	103	93	90	88
December.....	99	94	98	102	101	104	94	91	89
Quarters—									
First.....	99	99	100	99	99	101	99	99	99
Second.....	98	99	97	99	100	98	100	100	99
Third.....	102	97	100	105	100	103	99	98	98
Fourth.....	100	94	98	103	101	104	94	91	89
Year.....	100	97	99	101	100	101	98	97	96
1915—Months—									
January.....	101	97	100	105	101	105	95	92	90
February.....	102	97	100	105	101	106	97	94	92
March.....	101	98	100	105	102	105	98	95	92
April.....	101	99	100	104	102	103	97	96	93
May.....	101	101	100	104	102	103	99	97	96
June.....	100	102	100	102	102	100	99	97	95
July.....	103	103	102	105	102	103	101	97	96
August.....	103	102	102	103	102	101	103	97	96
September.....	101	103	102	98	102	99	105	98	98
October.....	101	106	104	97	102	99	108	103	103
November.....	103	109	107	99	102	102	111	106	106
December.....	107	111	111	101	102	103	112	107	107
Quarters—									
First.....	101	97	100	105	101	105	96	94	91
Second.....	101	101	100	103	102	102	98	97	95
Third.....	102	103	102	102	102	101	103	97	97
Fourth.....	104	109	107	99	102	101	111	105	105
Year.....	102	102	102	102	102	102	102	98	97

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base average prices July, 1913, to June, 1914=100.]

	All commodities.			Food group.			Clothing group.		
	Con- trolled.	Uncon- trolled.	All.	Con- trolled.	Uncon- trolled.	All.	Con- trolled.	Uncon- trolled.	All.
	(573)	(793)	(1,366)	(214)	(54)	(268)	(140)	(269)	(409)
1916—Months—									
January.....	113	116	115	106	102	105	114	111	110
February.....	115	119	118	106	102	106	117	113	113
March.....	117	121	121	106	103	106	119	116	115
April.....	120	123	123	109	104	109	121	117	116
May.....	121	123	123	110	104	109	124	118	118
June.....	120	124	122	110	104	109	126	120	120
July.....	121	124	123	112	104	111	127	123	122
August.....	125	124	125	116	104	115	131	125	125
September.....	127	125	127	119	104	118	133	128	129
October.....	134	127	132	127	104	125	143	131	135
November.....	143	131	141	133	105	130	159	139	146
December.....	146	135	144	132	105	129	171	145	154
Quarters—									
First.....	115	119	118	106	103	106	117	113	112
Second.....	120	123	123	110	104	109	124	118	118
Third.....	124	124	125	116	104	115	130	125	125
Fourth.....	141	131	139	131	105	128	157	139	145
Year.....	125	124	126	116	104	115	132	124	125
1917—Months—									
January.....	151	140	148	136	110	133	170	151	155
February.....	155	142	151	140	110	136	169	153	156
March.....	164	142	156	150	110	142	173	153	157
April.....	183	146	170	170	111	157	177	158	163
May.....	192	149	178	183	113	166	181	162	167
June.....	201	152	183	182	115	164	189	168	174
July.....	209	160	189	189	123	167	195	181	187
August.....	204	162	187	186	127	168	195	186	189
September.....	205	163	186	193	130	173	197	185	189
October.....	198	167	182	194	150	177	201	186	191
November.....	200	172	183	200	156	182	204	195	199
December.....	193	174	182	191	156	178	207	198	202
Quarters—									
First.....	157	141	152	142	110	137	170	152	156
Second.....	194	149	177	179	113	162	182	163	168
Third.....	206	162	187	190	127	169	196	184	188
Fourth.....	196	171	182	193	154	178	204	193	196
Year.....	188	156	175	176	126	162	188	173	177
1918—Months—									
January.....	195	178	185	193	165	182	214	205	209
February.....	198	180	187	196	165	184	216	207	212
March.....	197	182	188	194	166	182	222	210	218
April.....	196	187	191	189	170	180	236	216	228
May.....	192	189	190	182	172	177	240	214	226
June.....	189	191	189	179	180	175	244	215	228
July.....	195	194	193	186	180	182	247	221	233
August.....	199	195	196	192	180	187	249	221	234
September.....	204	199	201	199	181	194	241	230	237
October.....	201	201	201	194	182	195	242	231	238
November.....	200	200	201	193	188	194	241	227	234
December.....	204	197	203	201	189	202	238	223	230
Quarters—									
First.....	197	180	187	194	165	183	217	207	213
Second.....	192	189	190	183	174	177	240	215	227
Third.....	199	196	197	193	180	188	245	224	235
Fourth.....	201	199	202	196	186	197	240	227	234
Year.....	197	191	194	192	176	186	236	218	227

1 Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices, July, 1913, to June, 1914—100.]

	Rubber, paper, and fiber group.			Metals group.			Fuels group.		
	Con- trolled. (21)	Uncon- trolled. (98)	All. (119)	Con- trolled. (49)	Uncon- trolled. (67)	All. (116)	Con- trolled. (32)	Uncon- trolled. (31)	All. (63)
1913—Months—									
January.....	144	108	114	120	118	120	100	104	102
February.....	140	108	113	118	113	118	99	106	101
March.....	133	108	112	117	111	116	99	106	101
April.....	125	103	107	115	110	114	98	107	101
May.....	118	103	105	114	109	113	98	106	101
June.....	115	103	105	111	108	111	98	106	101
July.....	109	103	104	111	105	110	99	105	101
August.....	108	103	104	110	105	110	101	103	102
September.....	105	103	103	108	107	108	102	104	102
October.....	97	103	102	105	106	105	102	103	102
November.....	97	103	101	99	103	100	102	102	102
December.....	97	99	99	96	100	96	102	99	101
Quarters—									
First.....	139	108	113	118	114	118	99	105	102
Second.....	119	103	106	113	109	113	98	106	101
Third.....	107	103	103	110	106	109	101	104	101
Fourth.....	97	102	101	100	103	100	102	101	101
Year.....	116	104	106	110	108	110	100	104	101
1914—Months—									
January.....	96	98	98	95	99	96	102	100	101
February.....	98	98	98	98	98	98	102	99	100
March.....	98	97	98	97	96	97	101	99	100
April.....	101	98	99	96	95	96	99	97	98
May.....	100	98	98	94	94	92	94	95	96
June.....	93	97	97	92	92	93	93	93	95
July.....	93	97	96	92	90	91	93	89	94
August.....	110	98	101	93	100	94	93	87	94
September.....	105	98	100	94	92	93	91	85	92
October.....	97	97	98	91	87	91	89	84	91
November.....	99	97	98	89	87	89	89	83	91
December.....	111	97	100	89	90	89	89	83	91
Quarters—									
First.....	98	98	98	97	98	97	102	100	101
Second.....	98	98	98	94	93	94	95	95	96
Third.....	103	97	99	93	94	93	93	87	93
Fourth.....	102	97	99	90	88	89	89	83	91
Year.....	100	97	98	93	93	93	95	91	95
1915—Months—									
January.....	111	97	100	90	95	91	89	82	90
February.....	96	85	90	91	108	93	89	80	89
March.....	98	85	90	92	119	95	86	78	88
April.....	97	85	90	94	124	98	84	77	85
May.....	95	85	90	96	145	101	84	77	85
June.....	98	86	90	99	164	106	84	77	85
July.....	99	86	91	102	172	110	83	76	85
August.....	97	86	90	105	147	110	85	77	86
September.....	95	85	89	110	147	114	91	79	89
October.....	96	86	90	113	145	116	92	87	92
November.....	104	86	92	119	159	124	93	95	95
December.....	117	87	95	132	163	136	98	103	100
Quarters—									
First.....	102	89	93	91	108	93	88	80	89
Second.....	97	85	90	96	145	102	84	77	85
Third.....	97	86	90	106	155	111	86	78	87
Fourth.....	106	86	93	121	156	125	94	85	96
Year.....	100	87	91	104	141	108	88	82	89

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base: Average prices, July, 1913, to June, 1914—100.]

	Rubber, paper, and fiber group.			Metals group.			Fuels group.		
	Con- trolled.	Uncon- trolled.	All.	Con- trolled.	Uncon- trolled.	All.	Con- trolled.	Uncon- trolled.	All.
	(21)	(98)	(119)	(49)	(67)	(116)	(32)	(31)	(63)
1916—Months—									
January.....	132	93	103	141	186	147	105	111	106
February.....	122	96	104	148	203	154	106	115	107
March.....	130	99	109	164	201	168	109	120	109
April.....	124	103	112	168	212	174	114	120	112
May.....	114	105	112	166	209	171	114	123	113
June.....	106	106	111	165	197	169	114	123	113
July.....	101	107	112	165	185	167	113	123	113
August.....	102	109	114	169	181	170	107	123	110
September.....	102	111	117	172	181	172	105	118	109
October.....	106	113	120	177	187	176	109	117	111
November.....	111	116	123	202	196	202	119	119	120
December.....	125	119	129	220	202	218	123	119	122
Quarters—									
First.....	128	96	106	150	197	155	107	115	107
Second.....	114	104	112	167	206	171	114	123	113
Third.....	102	109	114	169	182	171	108	121	111
Fourth.....	114	116	124	199	195	199	117	118	118
Year.....	114	107	114	171	195	174	111	119	112
1917—Months—									
January.....	133	127	138	230	199	226	131	127	129
February.....	139	129	141	237	205	234	136	133	133
March.....	144	130	143	251	210	247	134	134	131
April.....	142	135	146	267	205	260	173	135	163
May.....	150	136	148	285	206	276	182	137	172
June.....	147	136	147	330	205	315	184	137	173
July.....	140	135	144	350	205	333	178	140	168
August.....	140	135	143	328	198	313	¹ 178	140	169
September.....	142	142	149	¹ 295	192	283	176	142	165
October.....	139	142	147	234	188	228	176	142	164
November.....	138	141	146	212	190	209	179	144	167
December.....	138	140	145	211	186	208	180	148	170
Quarters—									
First.....	138	129	141	239	205	235	134	131	131
Second.....	146	136	147	296	206	286	180	136	170
Third.....	141	137	145	325	199	310	177	140	167
Fourth.....	138	141	146	219	188	215	178	145	167
Year.....	141	136	145	270	199	262	167	138	158
1918—Months—									
January.....	147	142	148	212	181	208	182	155	173
February.....	140	144	148	212	179	209	182	157	174
March.....	¹ 144	144	150	212	183	209	184	159	175
April.....	149	150	155	211	181	208	215	161	200
May.....	156	157	162	212	189	209	219	167	204
June.....	155	160	165	212	190	210	215	169	202
July.....	156	159	164	214	197	212	215	168	201
August.....	155	160	166	215	207	214	216	168	202
September.....	153	161	166	215	206	214	218	169	204
October.....	146	161	165	217	205	216	218	169	204
November.....	143	161	163	217	201	216	224	166	207
December.....	139	160	162	212	200	211	224	166	207
Quarters—									
First.....	143	143	149	212	181	209	182	157	174
Second.....	153	156	161	212	187	209	216	166	202
Third.....	155	160	165	215	203	213	216	168	202
Fourth.....	143	161	163	216	202	214	222	167	207
Year.....	149	155	160	213	193	211	209	164	196

¹ Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices July, 1913, to June, 1914=100.]

	Building materials group.			Chemicals group.		
	Con- trolled.	Uncon- trolled.	All.	Con- trolled.	Uncon- trolled.	All.
	(42)	(107)	(149)	(75)	(167)	(242)
1913—						
Months—						
January.....	108	100	104	102	103	103
February.....	108	101	104	102	103	104
March.....	109	101	105	103	103	104
April.....	110	101	105	103	102	103
May.....	110	101	105	103	102	103
June.....	110	101	105	102	102	102
July.....	104	101	102	102	102	102
August.....	104	101	102	102	101	101
September.....	104	102	103	101	102	101
October.....	100	101	100	100	100	100
November.....	99	100	100	100	101	100
December.....	99	100	100	100	101	101
Quarters—						
First.....	108	101	104	102	103	103
Second.....	110	101	105	103	102	103
Third.....	104	101	103	102	102	102
Fourth.....	99	100	100	100	100	100
Year.....	106	101	103	102	102	102
1914—						
Months—						
January.....	98	100	99	99	99	99
February.....	98	100	99	99	99	99
March.....	99	100	99	99	100	100
April.....	98	99	99	99	99	99
May.....	98	99	98	99	98	98
June.....	98	99	98	98	99	99
July.....	97	99	98	98	98	98
August.....	97	99	98	99	99	99
September.....	98	99	98	101	107	106
October.....	93	98	96	99	108	105
November.....	92	98	95	98	111	106
December.....	91	97	94	98	109	105
Quarters—						
First.....	98	100	99	99	99	99
Second.....	98	99	98	99	99	99
Third.....	97	99	98	99	101	101
Fourth.....	92	98	95	98	109	105
Year.....	96	99	98	99	102	101
1915—						
Months—						
January.....	90	96	93	98	135	123
February.....	91	96	93	99	141	126
March.....	91	96	93	99	142	126
April.....	91	96	93	107	147	133
May.....	92	96	94	108	144	132
June.....	92	97	94	108	154	137
July.....	93	100	96	125	158	146
August.....	93	99	95	129	158	148
September.....	93	99	95	141	163	155
October.....	104	101	101	152	166	162
November.....	106	100	101	163	171	172
December.....	106	101	102	173	174	178
Quarters—						
First.....	91	96	93	98	139	125
Second.....	92	96	94	107	148	134
Third.....	93	100	95	132	159	149
Fourth.....	105	101	102	163	170	171
Year.....	95	98	96	125	154	145

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918

[Base: Average prices July, 1913, to June, 1914=100.]

	Building materials group.			Chemicals group.		
	Con- trolled. (42)	Uncon- trolled. (107)	All. (149)	Con- trolled. (75)	Uncon- trolled. (167)	All. (242)
1916—Months—						
January.....	113	108	109	196	177	189
February.....	114	111	111	216	181	200
March.....	115	112	112	218	181	201
April.....	113	117	113	216	176	198
May.....	114	118	113	200	171	188
June.....	114	118	113	197	170	185
July.....	111	117	112	177	163	175
August.....	111	117	112	164	156	166
September.....	111	117	112	160	153	162
October.....	119	118	116	163	152	162
November.....	120	119	118	163	152	163
December.....	121	122	119	167	149	162
Quarters—						
First.....	114	110	110	210	179	196
Second.....	114	118	113	205	172	190
Third.....	111	117	112	167	158	168
Fourth.....	119	120	118	164	151	162
Year.....	115	116	114	187	165	179
1917—Months—						
January.....	129	132	129	166	145	159
February.....	130	133	130	167	142	157
March.....	131	135	132	172	141	159
April.....	157	141	146	179	142	163
May.....	158	144	148	190	152	172
June.....	159	148	151	192	157	174
July.....	164	151	155	196	162	180
August.....	164	152	155	203	161	183
September.....	164	153	156	217	163	190
October.....	165	153	157	217	167	193
November.....	¹ 167	155	159	¹ 213	167	191
December.....	167	155	159	221	167	193
Quarters—						
First.....	130	134	130	169	143	158
Second.....	158	144	148	188	150	170
Third.....	164	152	155	206	152	184
Fourth.....	166	154	158	217	167	192
Year.....	155	146	148	195	156	176
1918—Months—						
January.....	174	161	165	207	166	186
February.....	175	160	165	223	165	192
March.....	177	167	169	224	166	192
April.....	184	175	176	224	167	192
May.....	186	178	179	212	170	190
June.....	187	180	181	207	171	189
July.....	187	184	182	192	172	184
August.....	188	186	184	193	173	186
September.....	189	190	186	196	174	188
October.....	186	190	185	193	178	190
November.....	187	190	186	192	179	193
December.....	186	188	185	174	178	183
Quarters—						
First.....	176	162	167	218	166	190
Second.....	186	178	179	215	169	190
Third.....	188	187	184	194	173	186
Fourth.....	186	189	185	186	178	189
Year.....	184	179	179	203	172	189

¹ Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices July, 1913, to June, 1914=100.]

	The food group.										
	Feed and forage class.	Wheat and wheat products class.	Corn and corn products class.			Oats, rice, buckwheat, and their products class.			Barley, hops, rye, and their products class.		
	All controlled.	All controlled.	Controlled.	Uncontrolled.	All.	Controlled.	Uncontrolled.	All.	Controlled.	Uncontrolled.	All.
	(22)	(12)	(6)	(3)	(9)	(9)	(1)	(10)	(4)	(4)	(8)
1913—Months—											
January.....	83	105	70	99	79	92	100	92	100	98	99
February.....	80	104	72	99	80	92	100	92	98	98	98
March.....	80	102	75	99	82	93	100	93	95	99	97
April.....	86	104	82	99	87	94	100	95	96	99	98
May.....	90	104	84	99	89	96	100	96	99	99	99
June.....	92	104	90	99	92	97	100	97	98	100	99
July.....	89	99	91	99	93	103	100	103	94	100	98
August.....	102	98	108	99	105	105	100	105	104	100	102
September.....	105	100	110	100	107	101	100	101	114	100	105
October.....	104	99	103	100	102	105	100	104	107	101	108
November.....	104	100	105	100	104	103	100	103	103	101	102
December.....	101	100	100	100	100	100	100	100	99	100	100
Quarters—											
First.....	81	104	73	99	81	92	100	92	98	98	98
Second.....	90	104	85	99	89	96	100	96	97	99	99
Third.....	100	99	105	99	103	103	100	103	105	100	102
Fourth.....	103	99	103	100	102	102	100	102	103	101	102
Year.....	93	101	91	99	94	98	100	98	101	100	100
1914—Months—											
January.....	95	101	92	99	94	97	100	97	101	99	100
February.....	95	101	91	99	94	97	100	97	98	99	99
March.....	95	101	95	100	97	97	100	97	95	99	98
April.....	101	101	99	100	99	98	100	98	94	100	98
May.....	106	102	102	100	102	97	100	97	95	100	98
June.....	102	99	104	100	103	100	100	100	95	100	98
July.....	98	96	104	100	103	99	100	99	89	100	98
August.....	108	110	118	100	113	110	100	110	105	100	102
September.....	109	116	116	100	111	116	100	116	121	101	108
October.....	104	115	107	102	106	108	100	108	115	100	108
November.....	101	117	100	102	100	102	100	102	122	100	108
December.....	100	120	94	102	97	109	100	108	124	100	109
Quarters—											
First.....	95	101	93	99	95	97	100	97	98	99	99
Second.....	103	101	102	100	102	97	100	97	95	100	98
Third.....	105	107	114	100	110	108	100	108	105	100	102
Fourth.....	102	118	101	102	101	108	100	108	120	100	107
Year.....	101	107	102	100	102	102	100	102	105	100	102
1915—Months—											
January.....	108	135	104	102	103	113	100	113	138	100	114
February.....	109	146	108	101	106	120	100	120	150	100	118
March.....	110	150	105	101	104	122	101	122	141	101	116
April.....	111	148	110	101	107	121	101	121	139	102	115
May.....	110	148	110	102	108	119	101	119	141	103	117
June.....	109	127	108	103	106	115	101	115	135	103	114
July.....	113	128	114	103	111	116	101	115	135	103	115
August.....	108	121	118	103	114	106	101	106	129	104	113
September.....	95	111	111	103	109	99	101	99	105	103	104
October.....	88	115	93	103	96	99	101	99	109	104	106
November.....	92	114	93	103	96	101	101	101	115	103	108
December.....	95	124	97	104	99	102	101	102	121	103	110
Quarters—											
First.....	109	143	106	101	104	118	101	118	143	101	116
Second.....	110	141	109	102	107	118	101	118	138	103	116
Third.....	106	120	114	103	110	108	101	107	123	108	111
Fourth.....	92	118	94	103	97	101	101	101	115	108	107
Year.....	104	130	106	102	105	111	101	111	129	102	112

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base: Average prices July, 1913 to June, 1914=100.]

	The food group.										
	Feed and forage class.	Wheat and wheat products class.	Corn and corn products class.			Oats, rice, buckwheat, and their products class.			Barley, hops, rye, and their products class.		
	All controlled.	All controlled.	Controlled.	Uncontrolled.	All.	Controlled.	Uncontrolled.	All.	Controlled.	Uncontrolled.	All.
	(22)	(12)	(6)	(3)	(9)	(9)	(1)	(10)	(4)	(4)	(8)
1916—Months—											
January.....	105	128	110	104	108	104	101	104	132	103	113
February.....	104	126	108	104	107	104	101	104	132	104	114
March.....	100	117	106	105	105	104	101	104	125	105	112
April.....	104	122	111	105	109	129	101	128	129	105	114
May.....	108	120	110	105	108	139	101	159	131	105	115
June.....	106	113	106	105	106	139	101	159	131	106	115
July.....	103	120	117	105	114	140	101	159	130	106	115
August.....	108	143	125	105	119	142	101	141	157	106	124
September.....	110	152	128	105	120	144	101	144	176	106	131
October.....	117	167	140	105	130	155	101	155	182	106	133
November.....	126	177	144	105	133	163	101	162	200	106	140
December.....	126	168	134	105	126	163	101	162	194	105	137
Quarters—											
First.....	103	123	108	104	106	104	101	104	130	104	113
Second.....	106	119	109	105	108	136	101	135	131	105	115
Third.....	108	138	123	105	118	142	101	141	155	106	123
Fourth.....	125	171	140	105	130	160	101	159	192	106	137
Year.....	111	138	123	105	119	135	101	135	152	105	122
1917—Months—											
January.....	131	178	145	114	136	117	101	117	204	105	141
February.....	134	174	147	113	137	116	101	116	200	104	139
March.....	145	189	165	113	150	123	101	123	213	104	143
April.....	170	221	218	115	188	157	101	156	238	104	152
May.....	191	267	241	119	205	174	101	173	265	104	162
June.....	193	248	252	119	214	174	101	173	262	105	162
July.....	218	230	299	131	250	179	101	178	266	109	166
August.....	197	232	302	136	254	174	101	173	244	110	159
September.....	214	215	301	139	254	173	101	171	235	112	157
October.....	212	211	293	172	258	180	101	179	235	124	164
November.....	239	209	268	175	241	180	101	178	228	132	167
December.....	207	203	247	173	226	187	101	186	253	134	177
Quarters—											
First.....	137	181	153	113	141	119	101	119	206	104	141
Second.....	184	247	236	117	202	169	101	168	254	104	159
Third.....	210	226	301	135	253	175	101	174	248	110	161
Fourth.....	214	208	267	173	240	183	101	181	240	130	170
Year.....	184	216	240	135	209	161	101	161	237	112	158
1918—Months—											
January.....	207	202	243	181	225	192	101	190	260	154	192
February.....	220	205	247	181	228	197	101	195	308	154	210
March.....	220	202	232	181	217	209	101	207	358	153	227
April.....	190	209	233	184	219	214	101	212	327	158	219
May.....	175	206	219	185	209	207	101	206	283	160	205
June.....	170	207	223	191	214	206	101	205	228	171	192
July.....	175	215	236	185	221	210	101	208	217	175	190
August.....	187	213	242	182	225	197	101	196	217	176	191
September.....	200	212	227	183	214	191	101	189	210	177	189
October.....	184	211	195	183	192	197	101	196	202	178	187
November.....	185	211	190	194	191	194	101	192	200	178	186
December.....	189	214	211	194	206	195	101	194	199	179	186
Quarters—											
First.....	216	203	240	181	223	200	101	198	310	154	210
Second.....	178	208	225	187	214	209	101	207	278	163	205
Third.....	188	213	236	183	221	199	101	197	214	176	190
Fourth.....	186	212	198	190	196	196	101	195	200	178	186
Year.....	192	209	224	186	213	200	101	199	251	168	198

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices July, 1913, to June, 1914—100.]

	The food group.									
	Sugar and related products class.			Vegetables and truck class.	Edible vegetable oils class.			Fruits, nuts, and wine class.		
	Con-	Un-	All.		Con-	Un-	All.	Con-	Un-	All.
	trolled.	controlled.	(10)	All controlled.	trolled.	controlled.	(14)	trolled.	controlled.	(17)
	(9)	(1)	(10)	(15)	(13)	(1)	(14)	(10)	(7)	(17)
1913—Months—										
January.....	105	103	105	84	88	100	89	71	96	78
February....	100	103	100	86	90	111	91	71	97	73
March.....	101	103	101	85	90	114	91	74	97	75
April.....	99	103	99	85	94	110	95	75	99	76
May.....	99	103	99	84	95	112	95	88	100	80
June.....	99	107	99	90	98	112	98	102	102	103
July.....	105	107	105	88	105	108	105	96	103	98
August.....	110	107	110	102	106	106	106	89	108	99
September..	109	107	109	104	103	106	102	86	104	87
October.....	103	107	103	102	96	106	98	83	105	84
November..	104	107	104	97	98	108	99	88	103	89
December...	99	107	99	98	96	104	98	90	102	91
Quarters—										
First.....	102	103	102	85	89	111	90	72	97	74
Second.....	99	104	99	86	96	111	96	88	101	80
Third.....	108	107	108	98	104	107	105	90	103	91
Fourth.....	102	107	102	99	98	106	98	87	103	83
Year.....	103	105	103	92	97	109	97	84	101	86
1914—Months—										
January.....	96	107	96	98	98	98	98	99	101	99
February....	97	95	97	100	98	101	98	110	98	100
March.....	91	85	91	101	99	99	99	117	96	116
April.....	90	87	90	102	101	90	100	116	96	114
May.....	96	91	96	104	99	88	99	114	96	113
June.....	100	95	100	104	98	88	98	113	94	111
July.....	100	95	99	113	98	87	98	92	94	92
August.....	151	99	150	115	90	102	90	79	95	90
September..	161	99	160	104	88	82	88	69	97	71
October.....	136	99	136	93	81	81	81	60	97	63
November..	116	99	115	83	78	87	79	60	97	63
December...	115	99	115	81	83	120	84	61	96	63
Quarters—										
First.....	95	96	95	100	98	99	98	108	98	108
Second.....	95	91	95	103	100	88	99	115	95	113
Third.....	137	97	137	111	92	90	92	80	95	81
Fourth.....	122	99	122	85	81	96	81	60	97	68
Year.....	112	96	112	100	93	93	98	90	96	91
1915—Months—										
January.....	117	99	117	84	90	115	90	63	94	65
February....	131	95	131	86	98	144	99	66	95	68
March.....	136	95	135	86	96	145	97	66	95	68
April.....	136	95	136	88	93	140	94	76	95	75
May.....	138	95	138	91	90	115	90	82	94	82
June.....	139	95	139	91	87	114	87	90	90	90
July.....	138	95	138	89	84	112	84	85	90	85
August.....	133	99	133	92	81	120	82	74	89	75
September..	123	99	123	84	89	120	89	72	89	73
October.....	118	99	117	81	111	131	112	70	82	71
November..	132	99	132	89	115	149	115	67	84	69
December...	138	99	138	91	125	131	125	68	87	69
Quarters—										
First.....	128	96	128	86	94	135	95	65	95	67
Second.....	138	95	138	90	90	123	91	82	93	66
Third.....	132	97	131	88	84	118	85	77	89	78
Fourth.....	129	99	129	87	117	137	117	69	84	70
Year.....	132	97	131	88	96	128	97	73	90	74

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base: Average prices, July, 1913, to June, 1914=100.]

	The food group.									
	Sugar and related products class.			Vegetables and truck class.	Edible vegetable oils class.			Fruits, nuts, and wines class.		
	Controlled.	Uncontrolled.	All.		Controlled.	Uncontrolled.	All.	Controlled.	Uncontrolled.	All.
	(9)	(1)	(10)	(15)	(13)	(1)	(14)	(10)	(7)	(17)
1916—Months—										
January.....	134	99	134	101	129	132	129	72	86	73
February....	140	91	139	115	122	120	131	75	86	76
March.....	155	87	154	121	141	124	140	75	83	75
April.....	167	87	166	124	147	120	146	75	84	76
May.....	176	87	175	123	149	120	148	77	85	78
June.....	174	95	173	128	146	116	145	89	85	83
July.....	175	95	174	135	138	112	138	86	88	87
August.....	163	103	162	130	151	124	151	84	89	84
September..	153	95	152	138	145	108	144	80	92	81
October.....	170	95	169	139	163	97	162	82	99	84
November..	175	95	174	166	181	105	179	89	102	90
December...	159	95	159	177	180	96	178	89	102	90
Quarters—										
First.....	143	92	142	112	134	126	134	74	85	75
Second.....	173	90	172	125	147	119	147	81	85	81
Third.....	164	97	163	134	145	115	144	84	90	84
Fourth.....	168	95	167	161	175	100	173	87	101	88
Year.....	162	93	161	133	150	115	150	81	90	82
1917—Months—										
January.....	155	95	154	183	175	103	173	92	104	93
February....	156	87	156	212	175	101	173	106	104	106
March.....	164	87	163	272	183	89	181	114	101	113
April.....	184	87	183	275	199	97	196	114	101	113
May.....	185	87	184	314	209	91	206	114	100	115
June.....	181	99	180	307	211	91	208	118	110	117
July.....	189	99	188	276	199	93	197	116	106	115
August.....	206	99	204	215	199	87	197	109	108	109
September..	204	103	202	186	208	89	205	103	108	104
October.....	201	103	200	174	233	88	230	106	120	107
November..	200	134	199	182	246	79	243	116	126	117
December...	192	142	192	178	248	84	244	121	127	122
Quarters—										
First.....	159	90	158	222	177	98	176	104	108	104
Second.....	184	91	182	299	206	92	204	116	104	115
Third.....	200	100	199	226	202	90	200	109	108	109
Fourth.....	198	127	197	178	242	84	238	115	124	116
Year.....	185	102	184	232	207	91	204	111	109	111
1918—Months—										
January.....	182	147	181	184	252	88	249	124	129	124
February....	181	158	181	188	255	104	252	130	130	130
March.....	181	158	181	186	255	112	252	138	134	138
April.....	181	162	181	169	256	105	252	144	134	144
May.....	180	162	180	159	256	102	252	164	137	162
June.....	180	166	180	150	252	96	248	168	139	166
July.....	181	166	181	165	251	105	248	155	138	154
August.....	182	170	182	201	240	105	246	139	141	139
September..	203	193	202	207	255	97	251	136	143	136
October.....	212	193	212	196	255	103	252	140	153	141
November..	212	221	212	181	255	104	251	140	175	143
December...	213	221	213	171	255	120	252	137	184	140
Quarters—										
First.....	181	151	181	186	254	101	251	130	131	130
Second.....	180	163	180	159	254	101	251	159	137	158
Third.....	188	177	188	191	252	102	249	144	141	144
Fourth.....	212	212	212	183	255	109	252	139	171	142
Year.....	191	177	191	180	254	103	250	143	145	143

¹ Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices, July, 1913, to June, 1915=100.]

	The food group.									
	Spices and condiments class.	Tea, coffee, and cocoa class.			Tobacco and tobacco products class.	Live-stock, meats, and fats class.	Poultry and dairy products class.	Fish and oyster class.		
	All uncontrolled. (10)	Controlled. (9)	Uncontrolled. (11)	All. (20)	All uncontrolled. (15)	All controlled. (48)	All controlled. (43)	Controlled. (14)	Uncontrolled. (1)	All. (15)
1913—Months—										
January.....	103	129	103	124	103	97	104	104	105	105
February....	103	123	104	120	103	95	103	117	105	111
March.....	101	115	106	113	99	101	100	99	105	102
April.....	101	110	103	109	97	103	98	99	105	102
May.....	102	109	104	108	97	99	89	83	105	95
June.....	101	101	104	102	98	101	86	85	105	96
July.....	99	96	103	97	99	101	91	84	92	88
August.....	100	96	101	97	99	100	96	91	92	91
September..	99	98	102	98	101	100	102	93	99	95
October.....	100	108	102	107	102	100	107	92	102	97
November..	100	106	102	106	102	97	114	96	102	99
December...	100	101	101	101	102	97	115	115	102	106
Quarters—										
First.....	102	122	104	119	101	97	102	107	105	106
Second.....	101	107	103	106	97	101	91	89	105	98
Third.....	100	97	102	97	100	100	96	89	94	92
Fourth.....	100	105	102	105	102	98	112	101	102	102
Year.....	101	107	103	107	100	99	100	96	102	99
1914—Months—										
January.....	100	99	99	99	100	99	112	116	102	100
February....	101	102	99	102	100	101	105	107	102	104
March.....	101	98	98	98	99	101	99	112	102	107
April.....	101	98	98	98	99	101	90	101	102	102
May.....	99	96	99	97	99	101	84	96	102	99
June.....	99	101	98	100	99	101	84	96	102	99
July.....	99	98	98	98	99	103	90	99	102	101
August.....	110	102	107	103	100	105	96	101	102	101
September..	109	92	103	94	100	108	100	105	102	103
October.....	106	80	100	84	100	102	106	122	102	112
November..	105	81	101	84	100	100	112	112	102	107
December...	105	80	111	86	100	100	113	110	102	106
Quarters—										
First.....	101	100	99	100	100	100	105	112	102	107
Second.....	100	98	98	98	99	101	86	98	102	100
Third.....	106	97	103	98	100	105	95	102	102	102
Fourth.....	105	80	104	84	100	101	110	115	102	106
Year.....	103	94	101	95	99	102	99	106	102	104
1915—Months—										
January.....	107	82	103	86	101	95	112	113	102	107
February....	112	85	120	91	101	92	106	116	102	109
March.....	115	83	120	89	101	92	100	121	102	111
April.....	116	85	119	91	101	92	91	109	102	105
May.....	114	83	115	89	101	95	84	101	102	102
June.....	114	79	113	85	101	96	82	95	102	99
July.....	115	80	119	87	101	98	89	97	87	98
August.....	114	80	121	87	101	96	91	99	87	92
September..	114	76	118	83	101	96	96	96	87	91
October.....	117	77	119	84	101	98	101	92	87	89
November..	123	81	126	89	101	94	109	108	87	97
December...	124	82	121	88	101	92	111	98	87	92
Quarters—										
First.....	111	83	117	89	101	93	106	117	102	109
Second.....	114	82	116	88	101	94	86	102	102	102
Third.....	115	79	120	86	101	97	92	97	87	92
Fourth.....	121	80	122	87	101	95	97	99	87	93
Year.....	116	81	119	87	101	95	98	104	94	99

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base: Average prices, July, 1913, to June, 1914=100.]

	The food group.									
	Spices and condiments class.	Tea, coffee, and cocoa class.			Tobacco and tobacco products class.	Live-stock, meats, and fats class.	Poultry and dairy products class.	Fish and oyster class.		
	All uncontrolled.	Controlled.	Uncontrolled.	All.	All uncontrolled.	All controlled.	All controlled.	Controlled.	Uncontrolled.	All.
	(10)	(9)	(11)	(20)	(15)	(48)	(43)	(14)	(1)	(15)
1916—Months—										
January.....	129	81	120	88	101	94	109	106	88	97
February....	132	85	118	91	99	97	105	115	82	97
March.....	144	91	118	95	99	104	101	133	95	113
April.....	141	92	118	96	100	106	100	115	102	108
May.....	137	93	118	97	100	109	95	104	102	103
June.....	135	92	116	96	100	114	90	109	97	103
July.....	135	89	117	94	100	114	96	114	100	107
August.....	132	90	118	95	100	113	108	115	100	107
September..	132	94	117	98	100	116	108	119	100	109
October.....	132	92	116	96	100	114	124	134	100	116
November..	132	91	112	94	100	114	131	142	100	120
December...	140	89	111	93	105	116	134	153	100	125
Quarters—										
First.....	135	86	119	91	100	98	105	118	88	102
Second.....	138	92	118	97	100	109	95	109	100	106
Third.....	133	91	117	94	100	114	102	116	100	108
Fourth.....	135	91	113	95	102	114	129	143	100	120
Year.....	135	90	116	94	100	109	108	122	97	109
1917—Months—										
January.....	148	93	114	96	107	120	133	169	105	135
February....	155	92	118	96	109	127	132	166	105	134
March.....	158	87	117	92	109	138	124	181	105	141
April.....	164	88	125	94	110	150	137	199	105	150
May.....	169	90	132	97	110	156	130	198	105	150
June.....	171	90	132	97	119	156	122	189	105	145
July.....	171	87	130	94	129	152	130	189	109	147
August.....	170	85	133	98	134	156	142	189	109	147
September..	172	83	133	92	135	169	151	210	126	166
October.....	175	81	133	90	138	167	171	221	126	171
November..	178	80	132	89	155	168	174	235	126	178
December...	177	81	134	90	158	167	177	224	126	172
Quarters—										
First.....	154	91	116	95	109	128	130	172	105	137
Second.....	168	89	129	96	113	154	130	195	105	148
Third.....	171	85	132	93	133	159	141	196	114	153
Fourth.....	177	80	133	89	150	167	174	227	126	174
Year.....	167	87	127	94	125	152	144	198	113	153
1918—Months—										
January.....	176	89	135	96	154	167	193	247	126	183
February....	182	89	139	97	156	168	188	239	126	180
March.....	187	93	140	101	161	171	172	229	126	175
April.....	204	95	139	102	167	184	157	220	126	171
May.....	209	93	138	100	171	185	149	218	146	180
June.....	211	90	138	98	185	185	137	225	146	184
July.....	210	92	143	101	195	190	154	226	146	184
August.....	208	92	145	101	200	189	168	231	146	186
September..	209	100	148	108	202	198	182	233	146	188
October.....	206	111	149	118	203	191	203	251	156	201
November..	206	118	150	123	203	182	218	260	160	207
December...	201	177	154	173	200	193	227	264	174	217
Quarters—										
First.....	182	90	138	88	157	168	184	239	126	179
Second.....	207	93	139	100	175	185	147	222	139	178
Third.....	209	94	145	103	199	192	168	230	146	186
Fourth.....	204	129	151	133	202	189	216	258	163	206
Year.....	200	99	143	107	183	183	179	237	144	188

¹ Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices July, 1913, to June, 1914—100.]

	The clothing group.								
	Cotton and cotton products class.			Wool and woolen products class.			Silk and silk products class.		
	Con- trolled. (57)	Uncon- trolled. (24)	All. (81)	Con- trolled. (21)	Uncon- trolled. (45)	All. (66)	Con- trolled. (2)	Uncon- trolled. (52)	All. (54)
1913—Months—									
January.....	103	100	103	122	106	108	91	96	96
February.....	103	98	101	122	106	108	90	100	100
March.....	103	97	101	118	106	108	89	96	96
April.....	102	97	100	114	106	107	91	95	96
May.....	101	95	99	110	105	106	91	95	95
June.....	100	95	98	110	105	105	91	97	96
July.....	99	95	98	109	104	105	97	96	96
August.....	100	95	98	108	103	103	96	100	100
September.....	100	97	99	107	102	103	103	101	101
October.....	102	110	105	105	102	102	98	100	100
November.....	102	107	104	102	101	101	98	99	99
December.....	102	100	101	96	99	99	99	99	99
Quarters—									
First.....	103	98	101	121	106	108	90	97	97
Second.....	101	96	99	111	105	106	91	95	95
Third.....	100	96	98	108	103	104	98	99	99
Fourth.....	102	105	103	101	101	101	98	100	100
Year.....	101	99	100	110	104	105	94	98	98
1914—Months—									
January.....	100	96	98	92	98	97	101	100	100
February.....	100	98	99	92	98	97	102	101	101
March.....	99	103	101	94	98	98	103	100	100
April.....	99	98	98	97	98	97	103	100	100
May.....	99	100	99	99	98	98	102	100	100
June.....	99	102	100	101	98	99	99	103	103
July.....	99	102	100	102	99	99	103	100	100
August.....	97	102	99	103	100	100	99	96	96
September.....	94	72	86	105	100	100	91	94	94
October.....	89	64	79	106	100	101	88	93	93
November.....	85	52	72	111	101	102	82	90	90
December.....	84	56	73	114	101	103	86	91	91
Quarters—									
First.....	100	99	99	92	98	98	102	100	100
Second.....	99	100	99	99	98	98	101	101	101
Third.....	97	92	95	103	100	100	98	96	96
Fourth.....	86	57	75	110	101	102	85	91	91
Year.....	95	87	92	101	99	99	96	97	97
1915—Months—									
January.....	83	54	72	122	103	105	85	92	93
February.....	84	61	75	133	104	107	85	92	93
March.....	85	61	76	138	107	110	84	92	93
April.....	87	67	79	136	107	110	84	93	93
May.....	89	75	84	136	107	111	84	92	93
June.....	89	71	82	136	108	111	85	91	91
July.....	91	71	83	139	109	112	84	91	91
August.....	92	67	82	143	111	114	85	92	93
September.....	94	70	85	145	112	116	88	93	96
October.....	99	92	97	146	113	116	89	97	97
November.....	102	95	99	149	115	118	88	103	106
December.....	104	93	100	153	116	120	95	107	107
Quarters—									
First.....	84	59	74	131	105	108	85	92	93
Second.....	89	71	82	136	107	111	84	92	93
Third.....	93	69	83	143	111	114	85	92	91
Fourth.....	102	93	99	149	114	118	91	102	102
Year.....	92	73	84	140	109	113	86	95	94

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base: Average prices July, 1913, to June, 1914=100.]

	The clothing group.								
	Cotton and cotton products class.			Wool and woollen products class.			Silk and silk products class.		
	Con- trolled.	Uncon- trolled.	All.	Con- trolled.	Uncon- trolled.	All.	Con- trolled.	Uncon- trolled.	All.
	(57)	(24)	(81)	(21)	(45)	(66)	(2)	(52)	(54)
1916—Months—									
January.....	106	94	101	157	121	125	95	109	109
February.....	109	95	103	161	125	129	92	116	115
March.....	110	91	103	161	128	132	101	122	122
April.....	112	95	105	160	130	133	108	121	121
May.....	114	95	107	161	132	135	109	120	120
June.....	116	100	110	162	133	136	111	121	121
July.....	119	108	112	163	136	139	111	122	122
August.....	124	104	116	164	138	141	120	128	128
September.....	128	120	125	166	141	144	124	125	125
October.....	140	128	135	169	142	145	124	128	128
November.....	153	148	151	179	147	151	128	134	134
December.....	160	161	160	187	155	158	121	134	134
Quarters—									
First.....	108	98	102	160	125	129	96	116	116
Second.....	114	97	107	161	131	135	107	121	121
Third.....	124	109	118	164	138	141	118	125	125
Fourth.....	151	145	149	178	148	152	122	132	132
Year.....	124	111	119	166	136	139	111	124	123
1917—Months—									
January.....	158	141	151	194	164	167	119	132	132
February.....	157	138	150	203	170	174	110	126	124
March.....	161	131	149	215	175	179	112	134	133
April.....	169	148	161	217	182	186	113	136	136
May.....	172	156	166	230	188	193	115	136	136
June.....	184	167	177	255	197	203	137	141	141
July.....	198	203	197	268	206	213	164	147	147
August.....	194	200	196	273	218	225	173	153	153
September.....	200	192	197	273	223	228	161	151	151
October.....	206	192	200	283	227	234	152	145	146
November.....	206	224	218	285	237	243	142	147	147
December.....	211	228	218	286	244	248	152	147	147
Quarters—									
First.....	159	136	150	202	170	173	114	133	133
Second.....	175	157	168	234	189	194	122	138	138
Third.....	196	198	197	272	216	222	166	150	150
Fourth.....	208	215	210	285	236	242	149	147	147
Year.....	184	176	181	248	202	208	138	142	142
1918—Months—									
January.....	225	238	230	288	248	253	152	150	150
February.....	233	244	237	286	252	256	157	151	151
March.....	246	248	247	290	259	262	163	153	153
April.....	268	261	265	289	266	268	185	159	159
May.....	270	234	256	288	270	272	202	162	162
June.....	275	225	256	290	272	274	221	171	171
July.....	279	235	262	298	279	281	235	172	172
August.....	283	229	262	297	281	283	245	174	175
September.....	269	254	267	299	285	286	250	179	180
October.....	270	261	267	299	289	290	235	181	181
November.....	270	240	258	298	285	286	224	184	184
December.....	267	227	251	287	281	282	220	181	182
Quarters—									
First.....	235	243	238	288	253	257	157	151	151
Second.....	271	240	259	289	269	272	203	164	164
Third.....	277	242	264	298	282	283	244	175	176
Fourth.....	269	243	259	294	285	286	226	182	182
Year.....	263	242	255	292	272	274	208	168	168

¹ Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices July, 1913, to June, 1914=100.]

	The clothing group.					
	Hides and skins and their products class.			Hatters' fur class and fur felt hats.	Hair, bristles, and feathers class.	Buttons class.
	Con-trolled. (60)	Uncon-trolled. (96)	All. (156)	All un-controlled. (10)	All un-controlled. (22)	All un-controlled. (20)
1913—Months—						
January.....	97	99	98	105	101	108
February.....	97	99	98	105	101	107
March.....	96	99	98	105	101	106
April.....	95	98	97	105	101	107
May.....	95	99	97	105	101	105
June.....	95	99	98	105	100	105
July.....	95	99	98	104	100	104
August.....	97	99	99	104	100	104
September.....	98	100	99	103	99	104
October.....	101	100	100	103	99	108
November.....	101	100	100	101	99	108
December.....	100	100	100	99	99	102
Quarters—						
First.....	97	99	98	105	101	107
Second.....	95	99	97	105	101	106
Third.....	97	99	99	104	100	104
Fourth.....	100	100	100	101	99	102
Year.....	97	99	99	104	100	105
1914—Months—						
January.....	99	100	100	98	101	97
February.....	102	100	101	98	101	97
March.....	102	100	101	98	101	97
April.....	102	101	101	98	101	96
May.....	102	100	101	98	100	97
June.....	102	100	101	98	100	95
July.....	101	101	101	97	100	95
August.....	102	101	101	97	100	95
September.....	104	101	102	100	100	95
October.....	103	101	102	100	104	93
November.....	105	101	102	99	103	93
December.....	109	102	105	98	101	91
Quarters—						
First.....	101	100	101	98	101	97
Second.....	102	100	101	98	100	95
Third.....	102	101	101	98	100	95
Fourth.....	105	102	103	99	103	93
Year—	103	101	101	98	101	95
1915—Months—						
January.....	112	104	107	97	100	93
February.....	113	104	107	97	100	92
March.....	112	104	107	97	100	92
April.....	105	104	104	97	99	91
May.....	107	104	105	97	98	92
June.....	108	104	106	97	98	92
July.....	112	105	107	97	98	93
August.....	115	105	109	97	98	93
September.....	115	105	109	97	97	93
October.....	116	105	109	97	96	91
November.....	117	106	110	98	100	91
December.....	118	106	110	99	100	92
Quarters—						
First.....	112	104	107	97	100	93
Second.....	107	104	105	97	98	93
Third.....	114	105	108	97	98	90
Fourth.....	117	106	110	98	99	91
Year.....	113	105	108	97	99	92

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base: Average prices July, 1913, to June, 1916=100.]

	The clothing group.					
	Hides and skins and their products class.			Hatters' fur class and fur felt hats.	Hair, bristles, and feathers class.	Buttons class.
	Con- trolled. (60)	Uncon- trolled. (96)	All. (156)	All un- controlled. (10)	All un- controlled. (22)	All un- controlled. (20)
1916—Months—						
January.....	117	113	114	101	99	96
February.....	122	113	116	101	100	95
March.....	125	115	118	103	100	98
April.....	130	116	120	103	100	97
May.....	134	118	123	105	100	102
June.....	137	119	125	105	100	101
July.....	135	123	127	106	99	104
August.....	135	122	127	106	100	104
September.....	134	123	127	110	99	102
October.....	143	125	131	111	101	102
November.....	165	132	143	115	103	102
December.....	189	136	154	118	104	102
Quarters—						
First.....	122	114	116	101	100	96
Second.....	134	118	123	104	100	100
Third.....	135	123	127	107	99	103
Fourth.....	166	131	143	114	103	102
Year.....	139	121	127	107	100	101
1917—Months—						
January.....	189	159	169	121	106	107
February.....	184	158	167	125	106	108
March.....	185	158	167	130	107	107
April.....	182	158	166	130	107	107
May.....	186	157	167	131	106	109
June.....	182	158	166	131	109	109
July.....	180	168	172	132	110	707
August.....	176	168	174	132	112	101
September.....	168	167	165	135	114	107
October.....	168	167	168	136	113	107
November.....	175	168	170	155	112	107
December.....	177	168	171	159	115	169
Quarters—						
First.....	186	158	168	125	106	108
Second.....	183	158	166	131	108	109
Third.....	175	168	170	133	112	107
Fourth.....	173	168	170	150	113	107
Year.....	179	163	168	135	110	108
1918—Months—						
January.....	170	176	174	164	121	123
February.....	160	175	170	179	121	123
March.....	153	175	168	177	125	125
April.....	156	175	168	183	131	125
May.....	166	177	173	189	131	125
June.....	168	178	175	192	131	127
July.....	166	183	177	218	137	128
August.....	164	183	177	219	146	128
September.....	165	183	177	221	145	130
October.....	166	183	177	221	147	130
November.....	166	185	178	221	147	130
December.....	165	185	178	220	146	130
Quarters—						
First.....	161	175	171	173	122	124
Second.....	163	177	172	188	131	126
Third.....	165	183	177	219	143	129
Fourth.....	166	184	178	221	147	130
Year.....	164	180	174	200	136	127

¹ Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES 1913-1915.

[Base: Average prices, July, 1913, to June, 1915=100.]

	The rubber, paper, and fibers group.								
	Rubber and rubber products class.			Paper class.			Fibers and fiber products class.		
	Con- trolled. (10)	Uncon- trolled. (24)	All. (34)	Con- trolled. (1)	Uncon- trolled. (40)	All. (41)	Con- trolled. (10)	Uncon- trolled. (34)	All. (44)
1913—Months—									
January.....	109	111	123	101	101	101	116	97	105
February.....	161	111	122	101	98	99	116	97	105
March.....	149	111	119	101	101	101	116	98	105
April.....	138	104	111	100	101	101	113	99	105
May.....	127	103	108	101	101	101	108	99	108
June.....	123	104	108	100	100	100	105	99	101
July.....	113	104	106	101	100	100	105	101	102
August.....	111	104	105	101	100	101	109	101	104
September.....	104	104	104	100	100	100	111	102	105
October.....	92	104	102	100	100	100	108	102	104
November.....	93	104	102	100	100	100	103	102	102
December.....	96	98	98	99	100	100	99	102	100
Quarters—									
First.....	160	111	121	101	100	100	116	97	105
Second.....	129	104	109	100	101	100	108	99	103
Third.....	109	104	105	100	100	100	109	101	104
Fourth.....	94	102	100	100	100	100	103	102	102
Year.....	123	105	109	100	100	100	109	100	104
1914—Months—									
January.....	95	97	97	101	100	100	94	100	97
February.....	100	97	97	100	100	100	94	98	96
March.....	99	97	97	100	100	100	95	97	98
April.....	104	97	98	100	100	100	94	99	97
May.....	102	97	98	100	99	100	95	101	98
June.....	91	97	96	99	99	99	94	98	96
July.....	92	97	96	100	99	99	92	95	93
August.....	115	97	100	99	100	100	106	102	104
September.....	106	96	98	100	100	100	106	103	104
October.....	96	96	96	100	104	103	98	97	97
November.....	104	96	97	102	102	102	96	94	91
December.....	125	96	102	102	102	102	80	92	87
Quarters—									
First.....	98	97	97	100	100	100	94	98	97
Second.....	99	97	97	100	99	99	94	99	97
Third.....	104	97	98	100	100	100	103	100	101
Fourth.....	108	96	99	101	103	102	87	94	91
Year.....	102	97	98	100	100	100	94	98	96
1915—Months—									
January.....	126	96	102	100	101	100	82	96	90
February.....	98	80	84	99	100	100	86	96	92
March.....	100	79	83	99	100	100	89	101	95
April.....	98	79	83	99	99	99	93	106	101
May.....	93	80	82	99	100	99	97	102	100
June.....	97	80	83	99	100	100	100	106	103
July.....	99	80	84	99	100	100	99	108	104
August.....	95	79	83	99	100	100	98	108	104
September.....	92	79	82	99	100	100	97	108	103
October.....	94	80	83	99	100	99	98	108	104
November.....	107	80	85	99	100	99	101	111	107
December.....	127	80	90	99	101	100	107	111	110
Quarters—									
First.....	108	85	90	99	100	100	86	98	93
Second.....	96	80	83	99	100	99	97	105	102
Third.....	95	79	83	99	100	100	98	108	104
Fourth.....	109	80	86	99	100	100	102	110	107
Year.....	102	81	85	99	100	100	96	105	101

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES 1916-1918.

[Base: Average prices, July, 1913, to June, 1916=100.]

	The rubber, paper, and fibers group.								
	Rubber and rubber products class.			Paper class.			Fibers and fiber products class.		
	Con- trolled.	Uncon- trolled.	All.	Con- trolled.	Uncon- trolled.	All.	Con- trolled.	Uncon- trolled.	All.
	(10)	(24)	(34)	(1)	(40)	(41)	(10)	(34)	(44)
1916—Months—									
January.....	146	87	99	100	108	106	121	116	118
February.....	127	87	95	99	116	112	128	132	131
March.....	140	87	98	99	131	122	129	138	134
April.....	131	88	97	101	147	134	126	139	133
May.....	116	88	94	102	153	139	119	143	133
June.....	101	88	91	104	158	143	118	145	134
July.....	92	89	89	108	162	147	117	150	137
August.....	92	89	90	112	169	153	119	153	139
September.....	93	89	90	115	178	160	118	153	139
October.....	97	90	92	118	187	168	121	156	142
November.....	104	92	95	116	194	173	127	156	144
December.....	119	98	98	126	202	181	141	169	158
Quarters—									
First.....	138	87	97	99	118	113	127	129	128
Second.....	116	88	94	102	153	139	121	142	133
Third.....	92	89	90	111	169	153	118	152	138
Fourth.....	107	92	95	120	194	174	129	161	148
Year.....	113	89	94	108	159	145	124	146	137
1917—Months—									
January.....	121	102	106	149	208	192	151	180	166
February.....	125	103	107	162	209	196	155	189	175
March.....	132	103	109	169	208	197	155	192	177
April.....	127	103	112	168	208	197	163	207	189
May.....	129	109	113	168	202	192	194	216	206
June.....	118	110	112	168	198	188	209	224	218
July.....	104	110	109	166	186	195	215	230	224
August.....	103	111	109	166	182	177	217	230	225
September.....	105	119	116	170	187	183	219	231	226
October.....	100	121	117	166	175	172	222	239	232
November.....	95	121	115	164	171	169	235	241	239
December.....	88	121	114	161	166	165	258	240	248
Quarters—									
First.....	126	102	107	160	209	195	154	187	173
Second.....	124	109	112	168	202	192	188	215	204
Third.....	104	113	111	168	185	180	217	231	225
Fourth.....	94	121	115	164	170	169	238	240	239
Year.....	112	111	112	165	192	184	199	218	210
1918—Months—									
January.....	96	123	117	170	165	166	266	239	250
February.....	83	125	117	169	168	168	270	238	251
March.....	88	125	118	170	170	170	272	238	252
April.....	93	131	123	173	177	176	280	240	256
May.....	¹ 98	139	131	191	181	184	281	244	260
June.....	98	140	131	191	194	193	280	247	261
July.....	98	140	131	195	191	192	281	243	259
August.....	98	141	132	195	195	194	275	244	256
September.....	98	141	132	195	198	197	266	244	253
October.....	98	141	132	196	199	199	233	245	240
November.....	96	141	131	196	199	199	224	244	236
December.....	96	141	131	196	199	198	206	232	221
Quarters—									
First.....	89	125	117	170	168	168	270	238	251
Second.....	97	137	128	185	184	184	280	244	259
Third.....	98	140	131	195	195	195	274	244	256
Fourth.....	97	141	131	196	199	198	221	240	232
Year.....	95	136	127	187	186	187	261	241	249

¹ Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER, SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices, July, 1913, to June, 1914=100.]

	The metals group.					
	Iron, steel, and their products class.			Ferroalloys, nonferrous, and rare metals class.		
	Con- trolled. (36)	Uncon- trolled. (52)	All. (88)	Con- trolled. (13)	Uncon- trolled. (15)	All. (28)
1913—Months—						
January.....	121	99	121	111	121	115
February.....	121	99	120	105	115	109
March.....	120	99	119	102	112	107
April.....	117	100	116	105	111	108
May.....	115	100	115	106	111	108
June.....	113	100	113	102	109	105
July.....	112	100	112	101	106	103
August.....	111	100	111	106	106	106
September.....	108	100	108	109	108	109
October.....	104	100	104	108	106	107
November.....	98	101	98	103	104	103
December.....	96	100	96	98	100	99
Quarters—						
First.....	121	99	120	108	116	110
Second.....	115	100	114	104	110	107
Third.....	110	100	110	105	107	106
Fourth.....	99	100	99	103	103	103
Year.....	111	100	111	104	109	105
1914—Months—						
January.....	95	100	95	97	99	96
February.....	98	100	98	98	98	98
March.....	98	100	97	96	96	96
April.....	96	99	96	96	94	95
May.....	93	99	93	95	93	94
June.....	92	99	92	94	91	92
July.....	92	99	92	92	89	91
August.....	93	99	93	92	100	95
September.....	95	99	95	89	91	90
October.....	92	99	92	84	84	84
November.....	90	99	90	85	86	85
December.....	89	99	89	90	89	89
Quarters—						
First.....	97	100	97	97	97	97
Second.....	94	99	94	95	92	94
Third.....	93	99	93	91	93	92
Fourth.....	90	99	90	86	86	86
Year.....	93	99	93	92	92	92
1915—Months—						
January.....	89	99	89	94	95	94
February.....	90	98	90	100	110	104
March.....	90	98	90	102	123	111
April.....	91	97	91	112	129	119
May.....	91	97	92	119	153	134
June.....	93	97	93	131	175	150
July.....	97	97	97	127	185	152
August.....	103	97	103	119	155	124
September.....	108	98	108	122	155	126
October.....	111	100	111	122	152	125
November.....	117	100	117	129	169	145
December.....	131	100	131	138	174	153
Quarters—						
First.....	90	98	90	98	100	103
Second.....	92	97	92	121	152	124
Third.....	103	97	103	122	165	140
Fourth.....	120	100	119	130	165	145
Year.....	101	98	101	118	148	130

PRICE SECTION WEIGHTED INDEX NUMBER, SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base: Average prices, July, 1913, to June, 1914—100.]

	The metals group.					
	Iron, steel, and their products class.			Ferroalloys, nonferrous, and rare metals class.		
	Con- trolled. (36)	Uncon- trolled. (52)	All. (88)	Con- trolled. (13)	Uncon- trolled. (15)	All. (28)
1916—Months—						
January.....	139	105	138	156	200	175
February.....	143	106	143	173	219	192
March.....	161	106	160	178	217	194
April.....	165	113	164	187	228	205
May.....	162	119	161	190	234	205
June.....	163	119	162	177	210	191
July.....	165	120	164	167	195	179
August.....	169	120	168	174	191	181
September.....	171	120	170	180	192	185
October.....	176	129	175	182	197	188
November.....	203	130	202	198	207	202
December.....	222	136	221	207	213	209
Quarters—						
First.....	146	106	145	169	212	187
Second.....	163	117	162	185	221	200
Third.....	168	120	167	174	192	182
Fourth.....	200	132	198	196	206	200
Year.....	169	119	168	181	208	192
1917—Months—						
January.....	237	142	235	193	208	200
February.....	241	142	238	217	215	217
March.....	257	145	254	223	221	222
April.....	276	149	274	211	215	213
May.....	297	155	294	222	217	219
June.....	348	160	344	227	213	221
July.....	374	170	370	212	211	212
August.....	349	175	346	205	201	203
September.....	¹ 313	189	310	¹ 197	192	195
October.....	244	185	243	176	189	181
November.....	219	185	218	171	191	180
December.....	218	185	217	172	186	178
Quarters—						
First.....	244	143	242	211	215	213
Second.....	310	154	306	220	214	218
Third.....	346	178	342	205	202	203
Fourth.....	227	185	226	173	188	180
Year.....	282	165	279	202	205	203
1918—Months—						
January.....	218	186	218	175	181	177
February.....	219	187	218	174	178	176
March.....	219	184	218	173	183	177
April.....	218	186	217	174	180	177
May.....	218	186	217	175	189	181
June.....	218	191	218	177	190	183
July.....	218	194	218	188	197	192
August.....	220	194	219	189	209	197
September.....	220	194	219	189	208	197
October.....	222	199	222	189	206	196
November.....	223	201	222	189	201	194
December.....	217	205	217	183	199	190
Quarters—						
First.....	219	185	218	174	181	177
Second.....	218	188	217	175	187	180
Third.....	219	194	219	188	205	195
Fourth.....	221	202	220	187	202	193
Year.....	219	192	218	181	194	187

¹ Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices July, 1913, to June, 1914=100.]

	The fuels group.				
	Coal and coke class.	Petroleum and petroleum products class.			Matches class.
	All con- trolled. (27)	Con- trolled. (5)	Uncon- trolled. (22)	All. (27)	All uncon- trolled. (9)
1913—Months—					
January.....	104	87	104	99	99
February.....	101	93	106	102	99
March.....	100	96	106	103	99
April.....	99	95	107	104	99
May.....	99	96	106	103	99
June.....	100	96	106	103	99
July.....	100	98	105	103	99
August.....	101	102	103	103	99
September.....	101	104	104	103	99
October.....	102	104	103	103	100
November.....	102	105	102	103	100
December.....	101	105	99	101	100
Quarters—					
First.....	102	92	105	102	99
Second.....	99	95	106	103	99
Third.....	101	101	104	103	99
Fourth.....	101	104	101	102	100
Year.....	101	98	104	102	100
1914—Months—					
January.....	100	105	100	101	101
February.....	100	103	99	102	101
March.....	100	106	99	101	101
April.....	98	101	97	98	101
May.....	98	82	95	92	101
June.....	98	80	93	89	101
July.....	98	79	89	86	101
August.....	99	78	87	84	101
September.....	99	70	85	81	101
October.....	99	64	83	78	101
November.....	99	63	83	77	101
December.....	99	63	83	77	101
Quarters—					
First.....	100	106	99	102	101
Second.....	98	88	95	93	101
Third.....	99	76	87	84	101
Fourth.....	99	63	83	77	101
Year.....	99	83	91	89	101
1915—Months—					
January.....	99	63	81	76	101
February.....	99	63	80	75	101
March.....	98	55	77	71	101
April.....	95	54	77	70	105
May.....	95	54	77	70	106
June.....	95	54	77	70	105
July.....	95	52	76	69	105
August.....	95	58	77	71	105
September.....	96	75	79	78	106
October.....	96	79	86	84	106
November.....	97	81	95	91	106
December.....	99	97	103	101	106
Quarters—					
First.....	99	60	79	74	101
Second.....	95	54	77	70	106
Third.....	95	62	77	73	106
Fourth.....	98	86	95	92	106
Year.....	97	65	82	77	104

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base: Average prices July, 1913, to June, 1914=100.]

	The fuels group.				
	Coal and sake class.	Petroleum and petroleum products class.			Matches class.
	All con- trolled. (27)	Con- trolled. (5)	Uncon- trolled. (22)	All. (27)	All uncon- trolled. (9)
1916—Months—					
January.....	102	114	111	112	121
February.....	100	122	115	117	121
March.....	99	136	120	125	121
April.....	103	142	120	127	121
May.....	103	144	123	130	121
June.....	103	144	123	130	122
July.....	103	142	123	128	123
August.....	104	115	123	120	124
September.....	106	104	118	114	124
October.....	110	106	117	114	127
November.....	123	108	118	115	137
December.....	122	125	119	121	148
Quarters—					
First.....	100	124	115	118	121
Second.....	103	143	123	129	121
Third.....	104	120	121	121	124
Fourth.....	110	113	118	117	137
Year.....	106	125	119	121	126
1917—Months—					
January.....	127	142	126	131	163
February.....	127	163	132	141	164
March.....	124	163	133	142	164
April.....	177	163	135	143	164
May.....	180	164	136	144	164
June.....	180	168	137	146	164
July.....	180	172	139	149	165
August.....	¹ 181	172	139	149	165
September.....	170	193	141	157	165
October.....	169	193	142	157	166
November.....	174	193	143	158	167
December.....	175	193	148	161	168
Quarters—					
First.....	126	156	130	138	164
Second.....	185	165	136	145	165
Third.....	177	178	140	151	165
Fourth.....	173	193	145	159	167
Year.....	165	173	138	148	165
1918—Months—					
January.....	177	195	155	167	168
February.....	177	196	157	169	168
March.....	178	200	159	171	169
April.....	215	215	161	177	169
May.....	218	223	167	183	169
June.....	213	223	169	185	170
July.....	212	223	168	184	171
August.....	213	¹ 223	168	184	172
September.....	215	227	169	186	173
October.....	215	227	169	186	173
November.....	223	227	166	184	173
December.....	223	227	166	184	174
Quarters—					
First.....	177	197	157	169	168
Second.....	215	220	166	182	169
Third.....	214	224	168	185	172
Fourth.....	220	227	167	185	174
Year.....	207	217	164	180	171

¹ Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES 1913-1915.

[Base: Average prices July, 1913 to June, 1914=100.]

	The building materials group.									
	Clay products class.			Sand and gravel class.			Quarry products class.	Cement class.		
	Con- trolled. (3)	Uncon- trolled. (13)	All. (16)	Con- trolled. (8)	Uncon- trolled. (1)	All. (9)	All uncon- trolled. (15)	Con- trolled. (6)	Uncon- trolled. (1)	All. (7)
1913—Months—										
January.....	99	97	98	98	100	98	98	91	100	91
February....	100	97	98	99	100	99	98	94	100	94
March.....	100	98	99	98	100	98	100	99	100	99
April.....	100	100	100	98	100	98	100	103	100	102
May.....	100	100	100	99	100	99	100	104	100	104
June.....	101	100	100	98	100	98	100	103	100	103
July.....	101	100	100	99	100	99	101	104	100	104
August.....	101	100	100	98	100	98	101	104	100	104
September..	101	100	100	99	100	99	101	105	100	105
October.....	100	100	100	99	100	99	101	105	100	105
November..	100	98	99	99	100	99	101	102	100	102
December...	100	98	99	100	100	100	101	100	100	100
Quarters—										
First.....	100	97	98	98	100	99	98	95	100	95
Second.....	100	100	100	98	100	99	100	103	100	103
Third.....	101	100	100	99	100	99	101	104	100	104
Fourth.....	100	99	99	99	100	99	101	102	100	102
Year.....	100	99	100	99	100	99	100	101	100	101
1914—Months—										
January.....	101	100	100	100	100	100	101	96	100	96
February....	100	100	100	101	100	101	101	95	100	95
March.....	100	100	100	102	100	102	101	99	100	99
April.....	99	100	100	101	100	101	98	99	100	99
May.....	99	100	100	101	100	101	98	97	100	97
June.....	99	101	100	100	100	100	98	97	100	97
July.....	98	101	101	100	100	100	98	97	100	97
August.....	98	102	101	99	100	99	98	99	100	99
September..	99	102	101	100	100	100	97	99	100	99
October.....	98	102	101	99	100	99	96	98	100	96
November..	99	101	100	100	100	100	96	96	100	96
December...	98	101	100	101	100	101	96	87	100	87
Quarters—										
First.....	100	100	100	101	100	101	101	97	100	97
Second.....	99	100	100	101	100	101	98	97	100	97
Third.....	99	102	101	99	100	99	98	98	100	96
Fourth.....	99	101	100	100	100	100	96	94	100	94
Year.....	99	101	100	100	100	100	98	96	100	96
1915—Months—										
January.....	96	101	99	105	100	105	97	85	100	85
February....	96	101	99	108	100	108	97	88	100	88
March.....	97	101	100	101	100	101	97	86	100	86
April.....	87	102	100	103	100	103	97	85	100	85
May.....	87	102	100	102	100	102	97	86	100	86
June.....	97	102	100	100	100	100	97	87	100	87
July.....	97	102	101	100	100	100	97	91	100	91
August.....	97	102	101	96	100	96	97	92	100	92
September..	97	102	100	97	100	97	97	93	100	93
October.....	97	102	100	99	100	99	97	94	100	94
November..	100	101	100	100	100	100	97	97	100	97
December...	100	103	102	106	100	105	97	96	100	96
Quarters—										
First.....	97	101	100	105	100	105	97	86	100	86
Second.....	97	102	100	102	100	102	97	86	100	86
Third.....	97	102	101	97	100	98	97	92	100	92
Fourth.....	99	102	101	102	100	102	97	96	100	96
Year.....	97	102	100	102	100	102	97	90	100	90

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES 1916-1918.

[Base: Average prices July, 1913 to June, 1916=100.]

	The building materials group.									
	Clay products class.			Sand and gravel class.			Quarry products class.	Cement class.		
	Con- trolled.	Uncon- trolled.	All.	Con- trolled.	Uncon- trolled.	All.	All uncon- trolled.	Con- trolled.	Uncon- trolled.	All.
	(3)	(13)	(16)	(8)	(1)	(9)	(15)	(6)	(1)	(7)
1916—Months—										
January.....	107	107	107	110	100	109	99	101	120	101
February....	109	107	108	110	100	109	103	104	120	104
March.....	112	105	107	109	100	109	103	110	120	110
April.....	112	105	107	109	100	109	105	112	120	112
May.....	113	109	110	108	100	108	105	115	120	115
June.....	114	109	110	110	100	110	108	115	120	115
July.....	117	110	112	110	100	110	108	113	120	113
August.....	118	114	115	110	100	109	108	114	120	114
September..	119	114	115	110	100	109	108	114	120	114
October.....	123	116	118	109	100	108	110	115	120	115
November..	125	118	120	112	100	111	110	117	120	117
December...	127	125	126	115	100	114	113	120	120	120
Quarters—										
First.....	109	106	107	110	100	109	102	105	120	105
Second.....	113	107	109	109	100	109	106	114	120	114
Third.....	118	113	114	110	100	109	108	114	120	114
Fourth.....	125	120	121	112	100	111	111	117	120	117
Year.....	117	112	113	110	100	110	107	112	120	112
1917—Months—										
January.....	130	133	132	126	121	126	120	125	130	125
February....	134	136	136	126	121	126	120	132	130	132
March.....	136	141	140	117	121	117	120	138	130	138
April.....	138	146	143	123	121	123	120	146	130	146
May.....	142	152	149	128	121	127	129	147	130	147
June.....	146	158	154	128	121	128	133	151	130	151
July.....	150	159	157	131	121	131	134	151	130	151
August.....	151	163	159	134	121	134	134	151	130	151
September..	152	163	160	133	121	132	134	151	130	151
October.....	152	163	160	131	121	131	143	152	130	152
November..	154	163	160	155	121	153	144	152	130	152
December...	155	164	161	159	121	157	144	149	130	149
Quarters—										
First.....	134	137	136	123	121	123	120	132	130	132
Second.....	142	152	149	126	121	126	127	148	130	148
Third.....	151	162	159	133	121	132	134	151	130	151
Fourth.....	153	163	160	148	121	146	144	151	130	151
Year.....	145	153	151	132	121	132	131	146	130	146
1918—Months—										
January.....	156	174	169	183	136	181	148	151	170	151
February....	163	174	171	181	136	178	148	152	170	153
March.....	163	179	174	173	136	171	148	167	170	167
April.....	164	184	178	172	136	170	161	167	170	167
May.....	172	195	188	177	136	175	166	172	170	172
June.....	177	201	194	185	136	183	172	172	170	172
July.....	188	201	197	182	136	179	172	171	170	171
August.....	197	206	203	185	136	183	173	174	170	174
September..	203	211	208	184	136	181	173	173	170	173
October.....	201	211	208	196	136	192	173	172	170	172
November..	201	210	209	199	136	195	192	176	170	176
December...	205	200	201	197	136	194	192	173	170	173
Quarters—										
First.....	161	176	171	179	136	177	148	157	170	157
Second.....	171	193	187	178	136	176	167	171	170	171
Third.....	196	206	203	184	136	181	173	172	170	172
Fourth.....	203	207	206	197	136	194	186	174	170	174
Year.....	183	196	192	184	136	182	168	169	170	169

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES 1913-1915.

[Base: Average prices July, 1913, to June, 1914=100.]

	The building materials group.						
	Glass class.	Lumber class.			Paints and varnishes class.		
	All uncontrolled. (10)	Controlled. (24)	Uncontrolled. (38)	All. (62)	Controlled. (1)	Uncontrolled. (29)	All. (30)
1913—Months—							
January.....	102	115	103	111	90	99	99
February.....	102	115	103	111	88	100	99
March.....	102	115	103	111	92	100	100
April.....	102	115	103	111	92	100	100
May.....	102	115	103	111	94	99	99
June.....	102	115	103	111	94	100	99
July.....	102	105	102	104	94	100	100
August.....	102	105	102	104	102	100	100
September.....	102	105	102	104	102	102	100
October.....	101	99	101	99	102	101	101
November.....	101	99	101	99	100	100	100
December.....	101	99	101	99	100	100	100
Quarters—							
First.....	102	115	103	111	90	100	99
Second.....	102	115	103	111	94	100	99
Third.....	102	105	102	104	99	101	101
Fourth.....	101	99	101	99	101	100	100
Year.....	102	108	102	105	96	100	100
1914—Months—							
January.....	99	98	99	99	100	100	100
February.....	99	98	99	99	100	100	100
March.....	99	98	99	99	100	99	99
April.....	99	98	98	98	100	100	100
May.....	99	98	98	98	100	99	99
June.....	99	98	98	98	98	99	99
July.....	99	97	96	96	98	100	99
August.....	99	97	96	96	98	101	101
September.....	99	97	96	96	106	102	102
October.....	99	90	93	91	102	100	100
November.....	99	90	93	91	102	99	99
December.....	99	90	93	91	83	99	99
Quarters—							
First.....	99	98	99	99	100	100	100
Second.....	99	98	98	98	100	99	99
Third.....	99	97	96	96	101	101	101
Fourth.....	99	90	93	91	95	99	99
Year.....	99	96	97	96	99	100	100
1915—Months—							
January.....	91	90	93	91	82	99	99
February.....	90	90	93	91	94	100	100
March.....	90	90	93	91	98	100	100
April.....	90	91	91	91	100	103	100
May.....	90	91	91	91	98	104	100
June.....	90	91	91	91	100	105	105
July.....	90	92	90	91	96	120	113
August.....	90	92	90	91	94	117	106
September.....	90	92	90	91	90	116	115
October.....	90	109	95	104	96	117	116
November.....	95	109	95	104	110	116	115
December.....	91	109	95	104	118	119	119
Quarters—							
First.....	90	90	93	91	92	100	99
Second.....	90	91	91	91	100	104	104
Third.....	90	92	90	91	94	118	116
Fourth.....	91	109	95	104	106	117	117
Year.....	90	96	92	94	98	110	109

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES 1916-1918.

[Base: Average prices July, 1913, to June, 1914=100.]

	The building materials group.						
	Glass class.	Lumber class.			Paints and varnishes class.		
	All uncontrolled. (10)	Controlled. (24)	Uncontrolled. (38)	All. (62)	Controlled. (1)	Uncontrolled. (29)	All. (30)
1916—Months—							
January	105	117	99	111	121	124	124
February	107	117	99	111	134	132	132
March	107	117	99	111	139	137	137
April	111	113	99	108	153	154	154
May	111	113	99	108	146	155	154
June	112	113	99	108	134	152	152
July	112	109	100	106	121	146	145
August	112	109	100	106	118	143	142
September	113	109	100	106	121	144	142
October	114	119	103	113	146	142	142
November	114	119	103	113	165	146	147
December	114	119	103	113	181	150	151
Quarters—							
First	106	117	99	111	132	131	131
Second	112	113	99	108	144	154	153
Third	113	109	100	106	120	144	143
Fourth	114	119	103	113	163	146	147
Year	111	115	100	109	140	144	144
1917—Months—							
January	138	128	111	122	188	154	156
February	138	128	111	122	188	156	157
March	138	128	111	122	204	161	163
April	139	164	125	150	213	165	168
May	139	164	125	150	228	171	174
June	144	164	125	150	236	174	177
July	145	171	131	156	224	180	182
August	145	171	131	156	200	181	182
September	145	171	131	156	226	183	185
October	145	171	137	159	242	176	179
November	155	¹ 171	137	159	¹ 260	172	177
December	155	171	137	159	271	175	180
Quarters—							
First	138	128	111	122	194	157	159
Second	141	164	125	150	225	170	173
Third	145	171	131	156	217	181	183
Fourth	152	171	137	159	258	174	178
Year	144	159	125	146	223	171	173
1918—Months—							
January	161	179	142	166	276	176	181
February	161	179	142	166	287	176	181
March	168	179	142	166	294	190	195
April	168	190	152	176	307	205	210
May	169	190	152	176	307	207	211
June	170	190	152	176	287	210	214
July	171	188	153	176	283	222	225
August	171	188	153	176	287	228	231
September	178	188	153	176	283	232	235
October	178	184	154	173	287	231	234
November	178	184	154	173	278	227	229
December	179	184	154	173	271	226	228
Quarters—							
First	163	179	142	166	286	181	186
Second	169	190	152	176	299	207	212
Third	173	188	153	176	284	228	230
Fourth	178	184	154	173	278	228	230
Year	171	185	150	172	287	211	214

¹Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices July, 1913, to June, 1914=100.]

	The chemicals group.									
	Mineral acids class.			Heavy chemicals class.			Miscellaneous inorganic chemicals class.			Fertilizers class.
	Con-trolled.	Un-con-trolled.	All.	Con-trolled.	Un-con-trolled.	All.	Con-trolled.	Un-con-trolled.	All.	All con-trolled.
	(6)	(2)	(8)	(3)	(6)	(9)	(2)	(18)	(20)	(25)
1913—Months—										
January.....	102	100	102	103	97	101	104	102	102	103
February...	102	100	102	103	97	101	104	102	102	103
March.....	102	100	102	105	101	104	103	101	101	103
April.....	102	100	102	105	99	103	102	101	101	104
May.....	102	100	102	102	101	101	102	101	101	104
June.....	102	100	102	102	98	100	101	101	101	103
July.....	102	100	102	102	102	102	101	101	101	103
August.....	102	100	102	102	102	102	101	101	101	100
September..	101	100	101	94	102	97	100	101	101	99
October.....	101	100	101	100	100	100	100	101	101	99
November..	100	100	100	100	102	101	100	100	100	99
December...	99	100	99	100	101	100	100	100	100	100
Quarters—										
First.....	102	100	102	104	98	102	104	102	102	103
Second.....	102	100	102	103	99	101	102	101	101	104
Third.....	102	100	101	99	102	100	101	101	101	101
Fourth.....	100	100	100	100	101	101	100	100	100	100
Year.....	102	100	104	102	100	101	102	101	101	102
1914—Months—										
January.....	99	100	99	100	101	101	99	100	100	100
February...	99	100	99	100	100	100	100	100	100	100
March.....	99	100	100	100	100	100	100	100	100	101
April.....	99	100	99	100	98	99	100	100	100	100
May.....	99	100	100	100	95	99	100	100	100	100
June.....	99	100	99	100	97	99	100	98	99	99
July.....	99	100	99	100	101	100	100	98	99	98
August.....	98	100	98	100	99	100	99	98	98	98
September..	99	100	99	100	99	100	104	123	120	99
October.....	98	100	98	101	98	100	104	117	115	98
November..	97	100	97	101	99	100	103	114	112	96
December...	97	100	97	101	96	99	102	117	115	96
Quarters—										
First.....	99	100	99	100	100	100	100	100	100	100
Second.....	99	100	99	100	96	99	100	99	99	100
Third.....	98	100	99	100	100	100	101	107	106	99
Fourth.....	97	100	97	101	98	100	103	116	114	97
Year.....	98	100	99	100	96	100	101	105	105	99
1915—Months—										
January.....	97	100	97	101	96	99	102	117	115	96
February...	97	100	97	99	96	98	102	122	119	96
March.....	97	100	97	99	95	98	102	121	118	99
April.....	99	100	99	105	98	103	102	127	123	102
May.....	100	100	100	112	96	107	102	129	125	103
June.....	100	100	100	112	95	107	102	132	127	101
July.....	123	133	123	138	103	127	102	146	139	104
August.....	123	133	124	169	102	148	101	152	144	105
September..	141	152	141	171	102	149	102	151	143	109
October.....	142	152	142	202	102	170	101	156	147	116
November..	145	152	145	219	109	183	101	163	153	124
December...	146	152	146	316	111	250	101	178	165	149
Quarters—										
First.....	97	100	97	100	96	99	102	119	116	97
Second.....	100	100	100	110	96	106	102	129	125	102
Third.....	129	139	129	160	102	141	101	149	142	106
Fourth.....	144	152	144	245	107	201	101	165	155	139
Year.....	117	123	118	154	101	137	102	141	134	109

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base: Average prices July, 1913, to June, 1914=100.]

	The chemicals group.									
	Mineral acids class.			Heavy chemicals class.			Miscellaneous inorganic chemicals class.			Fertilizers class.
	Con- trolled. (6)	Un- con- trolled. (2)	All. (8)	Con- trolled. (3)	Un- con- trolled. (6)	All. (9)	Con- trolled. (2)	Un- con- trolled. (18)	All. (20)	All con- trolled. (25)
1916—Months—										
January.....	183	208	183	350	115	274	103	218	190	174
February....	194	208	195	507	117	381	104	251	227	179
March.....	197	208	197	498	117	375	106	256	231	179
April.....	196	208	196	443	121	339	108	281	253	177
May.....	181	208	182	351	120	276	108	275	248	159
June.....	180	245	182	367	122	288	107	261	236	156
July.....	153	208	154	327	125	262	107	243	221	141
August.....	139	170	140	310	123	249	107	226	207	135
September..	137	170	138	830	121	262	107	225	206	134
October.....	133	152	134	359	123	283	106	232	211	136
November..	132	152	133	343	120	271	107	221	202	138
December...	133	152	133	371	126	292	110	228	208	141
Quarters—										
First.....	192	208	192	451	116	343	104	242	219	177
Second.....	186	220	187	387	121	301	108	273	246	164
Third.....	143	183	144	322	123	258	107	231	211	137
Fourth.....	133	152	133	358	122	282	108	227	207	138
Year.....	163	190	164	379	121	296	107	243	221	154
1917—Months—										
January.....	133	137	133	351	166	291	112	231	212	144
February....	134	137	134	340	164	283	117	237	218	145
March.....	144	137	144	337	168	283	122	229	211	148
April.....	149	138	148	352	179	296	133	242	224	151
May.....	155	120	154	384	185	320	135	247	229	156
June.....	148	120	147	373	190	314	135	248	230	166
July.....	152	138	152	381	193	321	135	254	235	173
August.....	167	138	166	394	196	330	151	252	236	187
September..	170	138	169	519	192	414	154	256	239	189
October.....	171	148	170	471	203	384	149	254	237	198
November..	176	151	175	403	215	342	¹ 151	233	220	193
December...	186	158	185	410	214	347	150	234	220	202
Quarters—										
First.....	137	137	137	342	166	286	117	232	213	146
Second.....	151	126	150	370	185	310	134	246	228	158
Third.....	163	138	162	431	194	355	147	254	237	183
Fourth.....	177	152	177	427	211	358	150	240	226	198
Year.....	157	138	157	393	189	327	137	243	226	171
1918—Months—										
January.....	¹ 181	162	180	246	225	239	132	252	233	¹ 203
February....	191	158	190	263	217	316	149	235	221	215
March.....	197	158	196	346	217	304	149	236	222	215
April.....	202	232	203	¹ 323	225	292	132	258	237	218
May.....	184	232	185	299	230	276	133	261	240	206
June.....	174	195	175	293	226	271	133	256	236	203
July.....	154	176	155	245	224	238	133	240	223	195
August.....	154	176	155	254	235	248	133	240	223	197
September..	154	162	155	301	227	277	133	235	218	190
October.....	142	162	143	331	243	303	132	254	234	187
November..	142	162	143	327	252	303	132	251	232	187
December...	142	162	143	278	239	266	132	230	214	184
Quarters—										
First.....	190	159	189	318	220	287	144	241	225	211
Second.....	187	219	188	305	227	280	133	258	238	209
Third.....	154	171	155	267	229	255	133	238	221	194
Fourth.....	142	162	143	312	245	290	132	245	227	186
Year.....	168	178	169	301	230	278	135	246	228	200

¹ Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices July, 1913, to June, 1914=100.]

	The chemicals group.									
	Soaps and glycerin class.			Essential oils, flavoring and perfumery materials class.	Wood distillation products and naval stores class.			Natural dyestuffs and tanning chemicals class.		
	Controlled. (21)	Uncontrolled. (9)	All. (30)	All uncontrolled. (20)	Controlled. (5)	Uncontrolled. (4)	All. (9)	Controlled. (1)	Uncontrolled. (18)	All. (19)
1913—Months—										
January.....	96	99	98	90	121	118	119	100	102	102
February...	99	99	99	96	121	129	126	100	102	102
March.....	100	99	99	98	121	133	129	100	102	102
April.....	101	99	100	94	119	118	118	100	103	103
May.....	100	99	99	97	119	105	109	100	103	103
June.....	99	99	99	102	118	105	110	100	102	101
July.....	99	99	99	106	118	101	107	100	102	101
August.....	102	100	101	107	116	98	100	100	102	102
September..	102	100	101	104	116	98	104	100	103	101
October.....	102	100	101	105	108	92	97	100	101	100
November..	101	101	101	101	103	98	100	100	99	99
December...	101	101	101	99	103	97	99	100	99	99
Quarters—										
First.....	98	99	99	93	121	127	125	100	102	102
Second.....	100	99	99	97	119	109	112	100	103	102
Third.....	101	100	100	106	117	98	104	100	102	101
Fourth.....	101	101	101	101	104	96	99	100	100	100
Year.....	100	100	100	99	115	107	110	100	102	101
1914—Months—										
January.....	100	100	100	97	95	103	100	100	99	99
February...	100	100	100	97	95	109	104	100	99	99
March.....	99	100	100	97	87	102	97	100	99	99
April.....	99	100	99	98	87	100	96	100	99	99
May.....	99	100	99	96	87	102	97	100	99	99
June.....	97	100	99	95	87	104	99	100	99	99
July.....	98	100	99	98	87	104	99	100	99	99
August.....	98	100	99	94	87	108	97	100	99	99
September..	114	100	104	102	88	100	96	100	124	119
October.....	106	99	101	99	89	99	96	100	125	119
November..	99	99	99	92	93	98	97	100	129	122
December...	98	100	99	89	102	96	98	100	127	121
Quarters—										
First.....	100	100	100	97	92	105	101	100	99	99
Second.....	98	100	99	96	87	103	97	100	99	99
Third.....	103	100	101	98	87	103	98	100	107	106
Fourth.....	101	100	101	93	95	98	97	100	127	121
Year.....	100	100	100	96	90	102	98	100	108	106
1915—Months—										
January.....	98	100	99	88	110	93	98	100	122	117
February...	102	100	100	76	113	90	97	100	124	113
March.....	102	100	100	77	113	90	98	100	125	119
April.....	102	100	100	76	128	94	105	100	136	128
May.....	102	100	100	75	128	100	109	100	138	129
June.....	99	100	99	75	138	90	105	100	148	136
July.....	97	100	99	76	154	94	113	100	152	140
August.....	98	100	99	72	160	91	113	153	170	166
September..	109	100	102	71	173	87	115	211	182	199
October.....	125	100	107	72	173	96	121	252	195	208
November..	152	100	115	77	181	128	145	252	209	220
December...	158	100	117	80	198	144	161	252	226	233
Quarters—										
First.....	101	100	100	80	112	91	98	100	124	118
Second.....	101	100	100	75	131	94	106	100	140	131
Third.....	102	100	100	73	162	90	114	155	168	165
Fourth.....	145	100	113	76	184	122	143	252	210	220
Year.....	112	100	103	76	147	99	115	152	161	159

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base: Average prices July, 1913, to June, 1914=100.]

	The chemicals group.									
	Soaps and glycerin class.			Essential oils, flavoring and perfumery materials class.	Wood distillation products and naval stores class.			Natural dyestuffs and tanning chemicals class.		
	Controlled. (21)	Uncontrolled. (9)	All. (30)	All uncontrolled. (20)	Controlled. (5)	Uncontrolled. (4)	All. (9)	Controlled. (1)	Uncontrolled. (18)	All. (19)
1916—Months—										
January.....	154	100	116	79	228	151	176	274	280	278
February....	161	100	118	79	260	156	190	295	344	333
March.....	171	100	121	81	276	148	189	295	360	345
April.....	187	101	126	80	275	146	188	295	361	346
May.....	189	101	126	82	264	117	165	295	351	338
June.....	177	101	123	80	264	128	173	295	350	337
July.....	164	101	119	80	263	129	173	295	292	293
August.....	142	101	113	80	263	145	183	295	259	268
September..	148	101	115	82	207	140	162	295	252	262
October.....	166	104	122	82	170	136	147	295	232	247
November...	180	108	129	82	173	139	150	295	228	244
December...	190	107	131	82	185	144	158	295	220	238
Quarters—										
First.....	162	100	118	79	254	151	185	288	328	319
Second.....	185	101	125	81	268	131	175	295	355	341
Third.....	151	101	116	81	244	138	173	295	268	274
Fourth.....	179	106	127	82	176	140	152	295	227	243
Year.....	169	102	122	81	236	140	171	294	294	294
1917—Months—										
January.....	187	107	130	83	186	151	162	295	221	238
February....	193	107	132	82	198	145	161	295	220	238
March.....	196	107	133	83	193	142	158	295	223	240
April.....	208	110	138	81	221	137	164	295	222	239
May.....	238	129	161	83	226	141	168	295	220	238
June.....	260	144	177	91	226	135	164	295	213	232
July.....	253	144	175	91	245	126	165	295	210	230
August.....	238	138	167	92	247	126	166	295	211	231
September..	260	136	172	95	253	139	176	295	210	230
October.....	265	136	174	105	275	154	193	211	217	215
November...	267	140	177	104	282	156	197	211	206	207
December...	274	140	179	101	291	146	193	211	202	204
Quarters—										
First.....	192	107	132	82	191	146	160	295	222	239
Second.....	235	127	159	85	224	137	166	295	218	236
Third.....	250	139	171	93	249	130	169	295	210	230
Fourth.....	269	139	176	104	282	151	194	211	209	209
Year.....	236	128	160	91	237	141	172	274	215	229
1918—Months—										
January.....	276	142	181	102	284	143	189	189	204	201
February....	277	143	182	100	293	146	194	189	208	203
March.....	275	147	185	100	284	138	186	189	215	209
April.....	273	149	185	101	221	131	161	252	219	227
May.....	269	153	187	105	221	141	168	252	233	238
June.....	269	155	188	104	200	182	188	295	236	250
July.....	269	158	190	103	201	212	208	201	250	238
August.....	274	158	192	105	200	212	208	201	252	240
September..	275	160	193	112	200	241	227	201	253	240
October.....	279	168	201	121	200	259	240	201	251	239
November...	275	165	197	124	200	266	244	201	254	241
December...	219	172	186	124	200	255	237	201	255	242
Quarters—										
First.....	276	144	182	101	288	142	189	189	209	204
Second.....	271	152	187	103	214	152	172	266	229	238
Third.....	273	159	192	107	200	221	215	201	252	240
Fourth.....	257	168	194	123	200	260	241	201	254	241
Year.....	269	156	189	108	226	194	204	213	236	231

¹ Price control began during month.

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1913-1915.

[Base: Average prices July, 1913, to July, 1914=100.]

	The chemicals group.										
	Coal tar crudes, intermediates, and dyes class.			Drugs and pharmaceuticals class.	Proprietary preparations class.	Explosives class.			Miscellaneous organic chemicals class.		
	Controlled.	Uncontrolled.	All.	All uncontrolled.	All uncontrolled.	Controlled.	Uncontrolled.	All.	Controlled.	Uncontrolled.	All.
	(1)	(18)	(19)	(27)	(23)	(9)	(10)	(19)	(2)	(12)	(14)
1913—Months—											
January.....	83	112	109	103	100	103	104	104	107	106	106
February.....	83	112	109	103	100	102	104	103	103	105	105
March.....	83	111	108	100	100	104	104	104	103	105	105
April.....	100	114	113	100	100	103	104	103	103	102	102
May.....	100	113	112	100	100	103	104	103	103	101	101
June.....	100	112	111	99	100	103	104	104	101	101	101
July.....	100	112	111	98	100	103	104	103	101	100	100
August.....	100	107	106	99	100	103	103	103	101	100	100
September.....	100	105	105	101	100	103	103	103	101	101	101
October.....	100	103	103	100	100	100	99	98	101	101	101
November.....	100	103	103	99	100	102	102	102	99	99	99
December.....	100	102	102	99	100	102	103	102	99	98	98
Quarters—											
First.....	83	112	109	102	100	103	104	104	104	106	106
Second.....	100	113	112	100	100	103	104	103	102	101	102
Third.....	100	108	107	99	100	103	103	103	101	100	100
Fourth.....	100	103	103	99	100	101	101	101	100	99	99
Year.....	96	109	108	100	100	102	103	103	102	102	102
1914—Months—											
January.....	100	95	95	100	100	98	98	98	99	99	99
February.....	100	94	95	102	100	98	97	97	99	101	101
March.....	100	95	95	101	100	99	99	99	99	100	100
April.....	100	95	95	100	100	99	99	99	99	100	100
May.....	100	95	95	100	100	97	96	96	99	100	100
June.....	100	94	95	101	100	98	98	98	99	100	100
July.....	117	101	103	101	100	95	94	94	99	98	98
August.....	117	106	107	106	100	100	98	98	142	98	99
September.....	117	195	187	136	100	98	102	100	142	101	102
October.....	117	225	215	134	100	96	101	99	137	103	104
November.....	117	267	252	124	100	96	106	103	142	102	103
December.....	117	233	222	118	100	97	104	102	142	102	103
Quarters—											
First.....	100	95	95	101	100	98	98	98	99	100	100
Second.....	100	95	95	100	100	98	98	98	99	100	100
Third.....	117	134	132	114	100	98	98	98	128	99	100
Fourth.....	117	242	230	125	100	96	104	102	140	102	103
Year.....	109	141	138	110	100	98	99	99	117	100	101
1915—Months—											
January.....	117	255	242	117	100	97	188	161	137	102	102
February.....	117	411	383	116	101	98	187	161	125	100	101
March.....	117	448	417	117	101	97	186	160	125	100	100
April.....	833	554	581	122	101	107	189	165	142	100	101
May.....	833	435	473	126	101	109	188	165	148	100	101
June.....	833	572	596	132	100	111	200	174	154	104	105
July.....	1167	628	679	132	100	143	200	183	154	106	106
August.....	1167	638	688	138	100	142	198	181	148	108	108
September.....	1167	648	697	147	100	158	209	194	155	109	110
October.....	1418	663	735	152	100	175	212	201	152	109	110
November.....	1418	666	737	174	100	181	217	207	166	117	119
December.....	1500	680	758	178	100	177	219	206	166	119	120
Quarters—											
First.....	117	371	347	116	101	97	187	161	129	100	101
Second.....	833	520	550	127	101	109	193	168	148	101	103
Third.....	1167	638	688	139	100	148	202	186	152	107	108
Fourth.....	1445	667	741	168	100	177	216	205	162	115	116
Year.....	889	549	582	137	101	133	199	180	148	106	107

PRICE SECTION WEIGHTED INDEX NUMBER SEPARATED INTO CONTROLLED AND UNCONTROLLED PRICES, 1916-1918.

[Base: Average prices July, 1913, to July, 1914=100.]

	The chemicals group.										
	Coal tar crudes, intermediates, and dyes class.			Drugs and pharmaceuticals class.	Proprietary preparations class.	Explosives class.			Miscellaneous organic chemicals class.		
	Controlled.	Uncontrolled.	All.	All uncontrolled.	All uncontrolled.	Controlled.	Uncontrolled.	All.	Controlled.	Uncontrolled.	All.
	(1)	(18)	(19)	(27)	(23)	(9)	(10)	(19)	(2)	(12)	(14)
1916—Months—											
January.....	1500	668	747	194	100	179	211	202	166	123	124
February.....	1500	652	732	209	100	186	212	204	160	128	129
March.....	1500	643	724	216	102	188	208	202	160	132	133
April.....	1500	580	649	226	102	190	201	197	171	133	134
May.....	1500	560	649	224	102	188	188	188	171	134	135
June.....	1167	531	591	209	102	184	189	187	199	134	135
July.....	1167	465	532	198	102	171	186	182	191	133	135
August.....	1167	306	478	191	102	159	182	175	181	123	125
September.....	667	377	405	192	102	150	177	169	175	123	125
October.....	667	363	392	189	102	151	171	165	158	127	128
November.....	500	363	376	197	102	147	169	162	158	132	133
December.....	500	358	371	196	102	149	156	154	160	136	137
Quarters—											
First.....	1500	654	734	203	101	184	210	203	162	128	129
Second.....	1389	551	630	217	102	187	192	191	180	134	135
Third.....	1000	416	471	195	102	160	182	175	182	127	128
Fourth.....	556	361	379	194	102	149	165	160	159	132	133
Year.....	1111	495	553	202	101	170	187	182	171	130	131
1917—Months—											
January.....	500	350	364	192	102	147	140	142	175	136	137
February.....	500	344	359	197	102	147	132	137	175	135	136
March.....	500	329	345	214	103	152	130	136	183	135	137
April.....	500	307	325	222	103	158	128	137	184	142	143
May.....	500	299	318	227	103	165	136	145	201	151	153
June.....	500	301	320	224	104	163	137	144	211	152	153
July.....	500	285	305	223	105	169	133	144	211	197	197
August.....	500	281	302	221	105	169	134	144	208	205	205
September.....	500	280	300	224	108	172	136	147	201	210	210
October.....	500	271	293	230	110	173	136	147	201	232	232
November.....	500	286	307	232	110	175	140	151	206	216	216
December.....	500	297	316	234	110	178	140	151	210	212	212
Quarters—											
First.....	500	341	356	202	102	149	134	138	177	135	136
Second.....	500	303	321	225	104	165	134	143	199	148	149
Third.....	500	282	302	223	106	170	134	145	207	204	204
Fourth.....	500	285	305	232	110	175	138	149	206	220	220
Year.....	500	303	321	220	106	166	135	144	197	177	177
1918—Months—											
January.....	500	292	312	235	112	174	138	149	217	202	202
February.....	¹ 500	291	311	238	112	179	138	150	¹ 219	199	200
March.....	500	295	314	240	112	183	138	151	217	199	200
April.....	500	288	308	239	112	184	135	149	217	198	199
May.....	500	276	297	241	112	183	136	150	217	198	199
June.....	500	276	297	243	112	179	136	149	210	198	198
July.....	500	258	281	246	113	167	135	145	198	199	199
August.....	500	255	278	253	114	166	137	146	201	199	199
September.....	500	257	280	259	114	166	137	145	280	199	201
October.....	500	250	274	274	116	162	136	144	280	198	200
November.....	500	251	275	319	117	163	137	144	280	200	202
December.....	83	244	229	288	117	141	135	137	280	195	197
Quarters—											
First.....	500	293	312	238	112	179	138	150	218	200	200
Second.....	500	280	301	241	112	182	136	145	214	198	198
Third.....	500	257	280	251	114	166	136	145	226	199	200
Fourth.....	360	249	259	294	117	155	136	142	280	198	200
Year.....	464	270	289	256	114	170	136	146	234	199	200

¹ Price control began during month.

There follows a separation of the 1,366 commodities carried in the Price Section Index Number into those controlled and uncontrolled. The separation indicated forms the basis for all comparisons in this section, for the chain index of controlled and uncontrolled prices and for frequent illustrations in the inquiry. The individual commodity series counted as controlled are listed here under their proper classes, as numbered in the "History of Prices During the War," when one or more series of a class came under control. This method was also used to list the uncontrolled series. The class index numbers for the controlled and uncontrolled series run parallel. The first of the 50 classes in the Price Section Index Number, for example, is known as "8. Feeds and Forage Class" and the last as "57. Miscellaneous Inorganic Chemical Class." A full count of the series in one of these classes under the controlled list, and of those in the same class under the uncontrolled list, makes up the full number of series carried by the Price Section for that class.

(2) THE SERIES OF THE PRICE SECTION INDEX NUMBER CONSIDERED UNCONTROLLED.**FOOD GROUP.**

10. Corn and corn products class (3 series):
 - Alcohol, grain, 190 proof.
 - Beer, western, light or dark.
 - Whisky, Bourbon, 4 years in bond, 100 proof.
11. Oats, buckwheat, and rice class (1 series):
 - Puffed rice.
12. Barley, hops, rye, and their products class (4 series):
 - Beer, light or dark.
 - Hops, Pacific coast.
 - Hops, prime to choice, New York State.
 - Whisky, rye, straight, 4 years in bond, 100 proof.
13. Sugar and related products class (1 series):
 - Honey, clover, comb, lower grade.
15. Edible vegetable oils class (1 series):
 - Cocoa beans, in bags.
16. Fruits, nuts, and wine class (7 series):
 - Almonds, ne plus ultra, unshelled.
 - Apricots, canned, X standard, 2½ California.
 - Claret, medium grade, California.
 - Nuts, Brazil, medium, unshelled.
 - Peaches, canned, X standard, 2½ California.
 - Pineapple, canned X standard, 2½ Hawaiian, sliced
 - Walnuts, No. 1 soft shelled.
17. Spices and condiments class (10 series):
 - Cassia, China rolls.
 - Cloves, Zanzibar.
 - Ginger, Cochin, A. B. C.
 - Mace, Singapore.
 - Nutmegs, 105s to 110s.
 - Pepper—
 - Black, Lampong.
 - Black, Singapore.
 - Red, Japan.
 - Salt—
 - American, medium.
 - Domestic.
18. Tea, coffee, and cocoa class (11 series):
 - Cocoa—
 - Arriba.
 - Bahia.
 - Trinidad.
 - Tea—
 - Ceylon, Pekoe.
 - Country, green, gunpowder.
 - Country, green, imperial firsts.
 - Darzeeling, fancy orange.
 - Formosa, good.
 - Goochow, good.
 - Pingsuey, gunpowder, firsts.
 - Pingsuey, imperial firsts.

19. Tobacco and tobacco products class (15 series):

Broadleaf, Connecticut, second.
 Broadleaf, Pennsylvania, B's.
 Burley, good leaf, bright red.
 Cigars, little, under 3 pounds.
 Cigars, little, over 3 pounds.
 Cut plug.
 Habana Vuelta Abajo.
 Habana, remedios fillers.
 Habana, seed, medium and dark wrappers.
 Little Dutch, Ohio.
 Long cut.
 Plug.
 Scrap.
 Sumatra.
 Zimmers Spanish.

22. Fish and oysters class (1 series):

Codfish, salt, whole bank medium.

CLOTHING GROUP.

23. Cotton and cotton products class (24 series):

Cotton (raw materials)—

Cotton, average in the United States.
 Egyptian, brown F. G. F.
 Egyptian, medium.
 Good, No. 1, Oomra.
 Long staple, strict middling, $1\frac{1}{8}$ -inch.
 Long staple, strict middling, $1\frac{1}{8}$ -inch.
 Long staple, strict middling, $1\frac{1}{8}$ -inch.
 Long staple, strict middling, $1\frac{1}{8}$ -inch.
 Sea Island, extra choice.
 Short staple, upland middling, American.
 Short staple, upland middling, New York.
 Short staple, upland middling, New Orleans.

Cotton manufactures—

Hosiery—

Men's half, 176 needles, 17/1 combed yarn.
 Women's full fashioned, 18/1 combed yarn, 33 gauge.

Tire fabric, Sea Island, $17\frac{1}{4}$ -ounce, combed.

Underwear—

Long staple, men's balbriggan, 178E, $5\frac{1}{2}$ pounds per dozen, 26 gauge, 22/1 combed yarn.

Long staple, merino shirts and drawers, 50 per cent wool, 24 gauge.

Long staple, men's shirts and drawers, flat fleece, $12\frac{1}{2}$ to 13 pounds per dozen.

Long staple, women's ribbed union suits, 12 pounds per dozen.

Velvet, millinery (17 inch, 2.955 ounces per yard).

Cotton waste—

Dirty card fly, mill run.

No. 1 card strips, graded stock.

For packing purposes.

Dirty picker motes, mill run.

24. Wool and woolen products class (45 series):

Blankets, all-wool, 5 pounds to the pair.

By-products—

Noils, three-eighths blood.

Waste, card, one-fourth blood.

Tops—

Australian, 64s.

Buenos Aires, 40s.

Buenos Aires, 46s.

Territory, 56s.

Knit goods—

Men's shirts and drawers, 50 per cent wool, 24-gauge.

Men's half-hose, seamless, wool.

Worsted cloths—

Dress goods—

Sicilian cloth, cotton warp, 50-inch.

Serge, botany, 11433, 7-ounce, 54-inch.

Serge, 10-ounce, 54-inch.

Storm serge, double-warp, 50-inch.

Suitings—

Clay diagonal, 16-ounce, 56 to 58 inch.

Serge, Fulton Mills, 3192, 11-ounce, 56 to 58 inch.

Trousering—

Cotton warp, worsted-filled, 10 to 11 ounce, 60-inch.

Woolen cloths—

Carpets—

Axminster, 6 2/3 by 7.

Body Brussels, 9-wire, 256 pitch.

Tapestry, 8-wire, 200 pitch.

Broadcloth, dress, botany, 315, 10-ounce, 54 to 56 inch.

Felt, upholstery, 11 to 13 ounce.

Felt, interlining, 13-ounce.

Overcoating—

Melton, Worumbo, 30-ounce, 58-inch.

Twill, plain soft-faced, black, 24-ounce, 54 to 56 inch.

Suits, serge, 5130.

Shirtings—

All-wool flannel, white Ballard.

Black Thibet.

Wool, Middlesex.

Velour, dress, Worumbo, 829, 11-ounce, 54-inch.

Woolen yarn—

Carpet yarn, 3-ply velvet, 55 yards to the ounce.

Weaving yarn, 12 to 16 run, one-fourth blood.

Weaving yarn, 20 to 28 run, three-eighths blood.

Worsted yarn—

Carpet yarn, white 16s.

French system—

1/40s, one-half blood.

1/50s, domestic.

2/50s, fine territory or domestic.

Knitting yarn—

2/5s to 2/10s, one-fourth blood.

2/11s to 2/20s, one-fourth blood.

24. Wool and woollen products class (45 series)—Continued.

Worsted yarn—Continued.

Knitting yarn—Continued.

2/16s to 2/20s, three-eighths blood.

2/20s to 2/24s, low, one-fourth blood.

2/26s to 2/30s, one-half blood.

Weaving yarns Bradford system—

2/26s to 2/30s, one-fourth blood.

2/36s, three-eighths blood.

2/40s, one-half blood.

2/50s, fine territory or domestic.

25. Silk and silk products class (52 series):

Raw silk, Chinese—

Canton filature, extra extra A.

Steam filature, best chops, first and second choice.

Steam filatures, second grade chops.

Tsatilee improved, Stars and Stripes, and Red Indian.

Tsatilee improved black lion, 1, 2, 3.

Tussah, best chops.

Raw silk, Japanese—

Filature, Kansai, 13 to 15 extra extra.

Filature, Shinshu, No. 1, 13 to 15.

Silk manufactures—

Broad silk—

Nos. 1 to 23, inclusive.

Japanese Habutai, 6-momme, 36-inch.

Japanese Habutai, 3½-momme, 36-inch.

Hose—

Ladies', all-silk, standard quality.

Ladies', medium-priced, all-silk.

Ladies', cotton feet, silk-top.

Men's half, all-silk.

Men's, cotton-top.

Plush—

Tussah face, cotton back, artificial fur.

Millinery, artificial-silk face, cotton back, 17-inch.

Cloaking, 1410, Tussah warp, cotton filling.

Ribbon—

Satin and taffeta.

All-silk, satin, and taffeta.

Velvet—

Millinery, colored silk, spun silk warp, cotton filling.

Spun warp, millinery.

Semimanufactures—

Silk thread—

Embroidery, No. 1.

Embroidery, No. 2.

Spun silk yarn—

Artificial silk, B quality, 150 denier, unbleached.

Domestic, 60/1.

Domestic, gray, spun, 60/2-1

Imported, 200/2, gray.

Viscose yarn, artificial silk, B quality 360 denier, unbleached.

26. Hides and skins and their products class (96 series):

Calf-skin leather—

Full grained, bordered, black kip H, second grade.

Full grained, bordered, black, L, second grade.

Full grained, smooth, black, L, second grade.

Full grained, smooth, colored, M, second grade.

Snuffed, smooth, black, M, second grade.

Cattle hide leather—

Case, bag and strap leather:

Case, colors, 2½-ounce, B.

Strap, colors, 9-ounce, B.

Strap, colors, 6-ounce, B.

Embossed bag and belt, 4½-ounce, B.

Smooth bag, 3½-ounce, B.

Cattle side, upper leather—

Chrome, box, 1. m. weight, A quality.

Chrome, black, slightly corrected, smooth.

Chrome, patent.

Sides, black gun metal, 1. m. weight, A quality.

Waterproof, H weight, A quality.

Offal, heads, bellies, and shoulders—

Shoulders—

Double-oak belting.

Hemlock.

Heads—

Scoured oak heads.

Union heads.

Bellies—

Hemlock dry hide bellies.

Skirting—

California oak, No. 1.

California oak, BB, No. 2

Horsehide leather—

Glove, buffed, M, second grade.

Shoe, upper and patent.

Shoe, upper and patent, M, second grade.

Shoe, upper and patent, upper, M, second grade.

Sheepskin leather—

Fancy and other stock—

Bag roans.

Black, for beading, quarter lining, No. 1.

Black, for beading, quarter lining, No. 2.

Black, for beading, quarter lining, No. 3.

Tops and plain black chrome.

White alum.

Glove stock—

Domestic Napa.

Domestic suede.

Fleshers.

South African cape.

Glazed kid leather—

Black and colors, export and domestic.

26. Hides and skins and their products class (96 series)—Continued.

Glazed kid leather—Continued.

Shoe stock—

Black, dull and glazed.

Colors.

Imitation calf.

Leather manufactures—

Bags, cowhide, 2½-ounce, 18-inch.

Belting—

First quality.

Light doubles.

Regular quality.

Gloves, men's—

Unlined, mocha, P. X. M., first grade.

One clasp, P. X. M., unlined cape, first grade.

Silk lined, P. X. M., cape, first grade.

Silk lined, P. X. M., mocha, first quality.

Gloves, women's and children's—

Children's gloves, average grade.

One clasp, P. X. M., cape, second grade.

One clasp, P. K., cape, first grade.

One clasp, P. X. M., first grade.

Harness, sets—

Standard farm team.

Team, all purposes.

Single buggy, standard.

Horse collars—

High grade.

Standard imitation Scotch.

Saddles—

Riding, high grade.

Spring seat, standard.

Shoes, boys' and youths'—

Boys'—

Grade I.

Grade II.

Grade III.

Little Gents'—

Grade I.

Grade II.

Grade III.

Shoes, men's—

Black calf Oxford.

Black kid, A-boot.

Black, low price.

Black, Rumania calf.

Bench, combination tan Oxfords.

Bench, patent colt.

Farmer, mechanic, and laborer, 49-226.

Farmer, mechanic, and laborer, 49-307.

Handstitched patent kid Oxfords.

Rumania calf, high.

Steel or black calf A-boot.

Tan, low price.

Tan, kid, A-boot.

Vici kid.

26. Hides and skins and their products class (96 series)—Continued.**Shoes, misses' and children's—**

Children's gunmetal, button, low heel, sizes 9-11½.

Misses', vici patent, button, low heel, sizes 12-2½.

Shoes, women's—

Black kid, button, dull kid top.

Black kid, lace, regular top, classic heel.

Boots, McKay.

Boots, welt.

Brown kid, welt, leather heel, 7½-inch boot.

Glazed kid, Oxford, leather heel.

Glazed kid, welt, leather heel, 7½-inch boot.

Kid Oxford, McKay.

Low shoes, patent leather.

Oxford, McKay.

Oxford, welt.

Patent kid, full seam vamp, black cloth top.

Patent pump (T. and W.).

Black kid (T. and W.).

Suit case, cowhide, 2½-ounce, 24-inch.

27. Hatters' fur and fur felt hats class (10 series):**Coney—**

Best B. C. B. unpulled.

French, best extra.

French, best mottled.

French, unpulled.

Scotch, best B. C. B.

Hair, best 001H.

Hats—

Fur felt-A.

Fur felt No. 1.

Knox.

Stetson.

28. Hair, bristles, and feather class (22 series):**Bristles—**

Chunking, superior No. 3.

Chunking, superior No. 5.

Hankow, superior No. 3.

Hankow, superior No. 5.

Tiensin, superior No. 3.

Tiensin, superior No. 5.

Brushes—

Hair, prophylactic, No. 500.

Hand, prophylactic, No. 400.

Tooth, prophylactic, No. 1.

Feathers—

Chicken, body, colored, dry picked.

Chicken, body, white, dry picked.

Duck, white or yellow.

Geese, mixed gray.

Geese, prime white.

Turkey, body, white.

Feather articles—

Mattress, 40-pound.

Pillow, chicken feather, 18 by 25.

28. Hair, bristles, and feather class (22 series)—Continued.

Hair—

Cattle, washed, domestic.

Hog, processed, domestic.

Horse manes.

Horse tails.

Hair cloth, 50-pick, 24-inch.

29. Button class (20 series):

Raw materials—

Shells, fresh water pearl, all varieties.

Shells, yellow Manila, bold and bold medium, average weight $1\frac{1}{8}$ poundsOcean, West Australian, bold medium, average weight $\frac{1}{8}$ pound.Pearl, Tahiti, black chickens, average weight $\frac{1}{8}$ pound.

Vegetable ivory (Tagua nuts).

Manufactures—

Buttons—

Bone, white, commercial, 22-line.

Bone, underwear, Navy prices, 22-line.

Glass, jet, 18 line.

Metal, Army blouse, 36-line.

Metal, trouser, 27-line.

Pearl—

Ocean and fresh water.

Imported, ocean, Trochus Japanese, first grade.

Fresh water, all sizes and grades.

Ocean, West Australian, fine shirt button, 16-line.

Ocean, smoked Panama, 36-line.

Ocean, Tahiti, $\frac{1}{2}$ fine, 36-line.Ocean, West Australian, $\frac{1}{2}$ fine, 36-line.

Shoe, No. 4 bright black, regular finish.

Vegetable ivory, flannel shirt, 24-line.

Vegetable ivory, trouser, black, 22-line.

RUBBER, PAPER AND FIBERS GROUP.

30. Rubber and rubber products class (24 series):

Chemicals—

Barytes, domestic.

Flowers, sulphur.

Lithopone.

Magnesite, calcined.

Whiting, commercial.

Zinc oxide, standard American process.

Fabrics—

Cotton, 17 $\frac{1}{2}$ -ounce Sea Island, combed.

Reclaimed rubber—

Mechanical.

Truck tires.

Rubber products—

Clothing, rubber—

Calendered, single texture, western.

Calendered, double coated, fire coat.

Double texture, bombazine coat.

Single texture, woman's coat.

30. Rubber and rubber products class (24 series)—Continued.

Rubber products—Continued.

Footwear, rubber—

Arctics.

Boots.

Tires and tubes, rubber—

Pneumatic plain tread, 30 by 3½ inches.

Pneumatic non-skid, 30 by 3½ inches.

Pneumatic non-skid, 33 by 4 inches.

Pneumatic tubes, 33 by 4 inches.

Solid rubber tire, 36 by 5 inches.

Sundries, druggists'—

Ice bags, cloth lined.

Water bottles (all rubber).

Rubber goods—

Conveyor belting, 8-inch, 5-ply.

Water hose, ½-inch, 5-ply.

31. Paper class (40 series):

Paper—

Nos. 1 to 20, inclusive.

Boards—

Bogus bristol.

Chip.

News.

Plain.

Straw.

Paper—

Blotting.

Building, red rosin, sized sheeting.

Tissue, Manila.

Wrapping, Nos. 1 to 10, inclusive.

Writing, bond, No. 4.

Writing, coupon bond, No. 1.

32. Fibers and fiber products class (34 series):

Raw materials—

Fibers—

American, Kentucky, double dressed.

Flax, New Zealand, good, fair shipment.

Istle, Palma.

Jute, raw, M, double triangle, shipment.

Sisal, Mexican, current shipment.

Sisal, Java—A, shipment.

Manufactured products—

Cordage, jute—

Packing, coarse.

Papermaker's twine.

Rope, No. 1, ½-inch and above.

Rope, No. 2, ½-inch and above.

Twine, wool, A quality.

Twine, wrapping, 2 to 6 ply.

Twine, wrapping, hide rope form.

Cord and twine—

India, dark color, No. 2.

India, dark color, No. 9.

32. Fibers and fiber products class (34 series)—Continued.

Manufactured products—Continued.

Cordage, hard fiber—

Manila rope, third-grade basis.

Pure manila rope, basis $\frac{1}{4}$ -inch diameter.New Zealand rope, basis $\frac{1}{4}$ -inch diameter.

Russian, tarred basis.

Sisal, rope basis.

Hemp and twine—

American, mixed, No. 9.

American, mixed, No. 12.

Pure, No. 9.

Pure, No. 12.

Oakum—

Best.

Plumbers'.

United States Navy.

Navy.

Rope, hard fiber—

Manila, basis price.

Manila, lariat.

Oilwell drilling cables.

Sisal, basis, $\frac{1}{4}$ -inch diameter.

Transmission.

Packing, fine.

METAL GROUP.

33. Iron and steel and their products class (52 series):

Manufactures—

Adzes, carpenters'.

Anvils, American.

Augers, regular, 1-inch.

Axes, single-bit, base weight, first quality.

Braces, common ball.

Butts, loose-pin, wrought steel, $3\frac{1}{2}$ by $3\frac{1}{2}$ inch.

Carvers, stag handles, 8-inch.

Chains, traces, wagon, western standard, straight with ring.

Chisels, regular, socket firmer, 1-inch.

Files, 8-inch, mill bastard, Nicholson.

Gimlets, bits, common double cut.

Hammers, Maydole, No. $1\frac{1}{2}$.Hammers, farriers', $2\frac{1}{4}$ -pound, turning.

Hinges, gate, with latch, western.

Hinges, spring, holdback, cast-iron.

Hods, coal, galvanized, open, 17-inch.

Hooks, bush, light.

Hooks, grass, bent shank.

Hooks and eyes, group 3, No. $40\frac{1}{2}$.

Knives and forks, cocobolo handles, metal bolsters.

Knobs, door, steel, bronze plated.

Locks, common mortise, knob lock, $3\frac{1}{2}$ -inch.

Locks, padlocks.

Lock sets.

33. Iron and steel and their products class (52 series)—Continued.

Manufactures—Continued.

Pans, dripping, refrigerator, galvanized, 16-inch.
 Planes, Sargent, No. 414 Jack.
 Pails, galvanized, light.
 Punches, saddlers' or drive, good.
 Rasps, horse, 16-inch, plain.
 Rings and ringers, hog, gray iron.
 Rings and ringers, bull rings, steel.
 Saws, cross-cut, Disston, No. 2, 6-foot, Champion tooth.
 Saws, hand, Disston, No. 8, 26-inch, skewback.
 Shaves, spoke, iron.
 Shovels, Ames, No. 2.
 Spoons, tinned, iron, table.
 Springs, carriage, black, 1½-inch and wider.
 Staples, fence, bright.
 Swages, 1-inch.
 Tongs, 18-inch, blacksmiths'.
 Traps, fly, balloon, glove or Acme.
 Trowels, Johnson's, brick, 10½-inch.
 Truck, warehouse, hand.
 Turns, cupboard.
 Vises, solid-box, 50-pound.
 Vises, self-adjusting, jaw vises, Prentiss patent.
 Washers, cast-iron, ½-inch, barrel lots.
 Wedges, oil finish.
 Wheelbarrows, tubular steel, steel tray.
 Wire, clothes line, No. 20.
 Wire, cloth and netting, black.
 Wire, cloth and netting, standard galvanized.

34. Nonferrous metals class (11 series):

Antimony, ordinary brands.

Brass—

Sheets.

Rods.

Copper—

Casting.

Sheets.

Wire.

Lead—

Sheet.

Solder.

Pipe.

Tin, pig, straits.

Zinc, prime western.

35. Rare metals class (4 series):

Chromite, 40 per cent and over

Ferro vanadium.

Spiegeleisen, 20 per cent.

Tungsten ore, 60 per cent.

FUELS GROUP.

36. Petroleum and petroleum products class (22 series):

Fuel oil, wholesale markets—

Tulsa, Okla.

Vinton, La.

Houston, Tex.

San Francisco.

Los Angeles, Calif.

Gasoline, tank wagon—

Baltimore.

Chicago.

Kansas City.

New York.

San Francisco.

Kerosene, standard white, 110 test.

Kerosene, tank wagon—

Baltimore.

Chicago.

Kansas City.

New York.

San Francisco.

Lubricating oil—

Dark, steam refined.

Red paraffin.

Paraffin, 903 sp.

Spindle No. 150.

Spindle No. 200.

Paraffin, crude, 118 to 1,220.

37. Matches class (9 series):

Best and cheapest.

Japanese safety, extra quality, "Namco" brand.

Nitedal brand, safety.

Standard, No. 1.

Standard, No. 2.

Standard, No. 5.

Safe home.

Searchlight.

Strike-on-the-box.

BUILDING MATERIALS GROUP.¹

38. Clay products class (13 series):

Brick—

Face, building, No. 1, color gray.

Fire, high-grade.

Paving, No. 1.

Dinner sets, china, commercial grade.

China, decorated in cheap standard treatments.

Ground plastic.

Kaolin, refined white.

Pipe, sewer, salt-glazed, fire-clay.

¹ This group includes a few materials which are not strictly building materials, such as china, etc., but which are included in the group because of convenience in classification. The aggregate importance of these materials is so small, however, that their inclusion has a negligible influence on the index number.

38. Clay products class (13 series)—Continued.

Pipe, sewer, vitrified, salt-glazed, 4-inch.

Sanitary ware, white, with glazed finish.

Sinks, kitchen, porcelain.

Stoneware, Ohio standard, white and black.

Tile, drain, 4-inch.

39. Sand and gravel class (1 series):

Railway ballast.

40. Quarry products class (15 series):

Granite—

Dark, monumental.

Light, building, light blue.

Building, red, white, and blue.

Crushed, No. 3½, ½ inch to ¾ inch.

Monumental, red and gray

Paving blocks.

Limestone—

Crushed, for furnace flux.

Crushed, railway ballast.

Indiana building, buff, rough block.

Lime, in bulk.

Marble, sawn.

Slate, green roofing, No. 1 grade, 20 by 10.

Stone—

Building, gray blockstone.

Curbing, 4-inch and under.

Flagging, sawed.

41. Cement class (1 series):

Natural rock cement.

42. Glass class (10 series):

Glass—

Plate, polished, glazing area 3 to 5 square feet.

Plate, polished, glazing area 5 to 10 square feet.

Window, single, 40-A.

Window, double, 40-A.

Window, single, 40-B.

Window, double, 40-B.

Glassware—

Milk bottles, glass.

Nappies, 4-inch, common.

Pitchers, ½-gallon, common.

Tumblers, table, ½-pint.

43. Lumber class (38 series):

Ash—

Firsts and seconds, 4/4.

No. 1 common, 4/4.

No. 2 common, 4/4.

Birch—

Firsts and seconds, 4/4.

No. 1 common, 4/4.

No. 2 common, 4/4.

No. 3 common, 4/4.

43. Lumber class (38 series)—Continued.

Chestnut—

Firsts and seconds, 4/4.

No. 1 common, 4/4.

No. 3 common, 4/4.

Sound, wormy, 4/4.

Gum—

Firsts and seconds, 4/4, red.

Firsts and seconds, 4/4, sap.

No. 1 common, 4/4, red.

No. 1 common, 4/4, sap.

No. 2 common, 4/4.

Hickory—

No. 2 common, 8/4.

Maple, hard—

Firsts and seconds, 4/4.

No. 1 common, 4/4.

No. 3 common, 4/4.

Oak, plain—

Firsts and seconds, 4/4.

No. 1 common, 4/4.

No. 1 common.

No. 3 common, 4/4.

Poplar, yellow—

Firsts and seconds, 4/4.

No. 1 common, 4/4.

No. 2 common, 4/4.

No. 1 common, 8/4.

Saps or selects, 4/4.

Pine, eastern white—

Dimension: No. 1, S-1-S-L, 2 by 4 inches by 16 feet.

Dimension: No. 1, S-1-S-1L, 2 by 10 inches by 16 feet.

Inch finish, select, 1-inch.

No. 2 boards, 1 by 8 inches by 12 feet.

No. 3 boards, 12 by 10 inches by 20 feet.

No. 4 boards, mixed widths, 10 to 20 feet.

Selects, C and better, 5/4 M-L.

Shop, No. 1, 8/4 M-L.

Shingles, red cedar.

44. Paints and varnish class (29 series):

Paint pigments—

Bone black.

Lamp black.

Prussian blue.

Chrome green.

Paris green.

Ochre.

Venetian red.

Ultramarine.

Umber.

Chrome yellow.

Paints and pigments—

Barytes, domestic, floated.

Blanc fixe, pulp.

44. Paints and varnish class (29 series)—Continued.

Paints and pigments—Continued.

Lead—

Basic, sulphate.

Basic, carbonate, dry.

Red.

Litharge.

Lithophone.

Paint, outside white.

Whiting.

Zinc oxide.

Paint and varnish, raw materials—

Casein.

Carnauba wax.

Copal gum, Manila

Kauri gum, ordinary chips.

Oil, china wood.

Oil, linseed.

Shellac, T-N.

Turpentine, spirits of.

Varnish, inside, oil.

THE CHEMICALS GROUP.

45. Mineral acids class (2 series):

Hydrochloric acid (muriatic), 20° Baumé.

Rock salt, crushed, f. o. b. car, mines.

46. Heavy chemicals class (6 series):

Bicarbonate of soda, commercial, 99.9 per cent pure.

Caustic potash (potassium hydroxide), 88-92 per cent.

Lime, burnt, in bulk.

Rock salt, crushed.

Salt cake (sodium sulphate), unground, spot.

Sodium sulphide, 60 per cent.

47. Miscellaneous inorganic chemicals class (18 series):

Alluminum sulphate, commercial.

Barium chloride, white crystals.

Borax (sodium tetraborate), crystals and granulated.

Bromine.

Calcium carbide.

Calcium chloride.

Copper sulphate (blue vitriol).

Ferrous sulphate (copperas, sulphate of iron).

Lead acetate (sugar of lead), brown, broken.

Magnesium sulphate (epsom salts), technical.

Mercuric chloride (bichloride of mercury, corrosive sublimate).

Phosphorous, yellow.

Potassium chlorate crystals.

Potassium permanganate.

Silver nitrate (lunar caustic).

Sodium silicate (water glass, 40° Baumé).

Sodium trio-sulphate (hypo).

Zinc chloride.

49. Soaps and glycerin class (9 series):

Rosin, grade F, 280-pound barrel.

Soap—

Toilet, average of two leading brands.

White floating, Flotilla.

White floating, Ivory.

White laundry, Proctor & Gamble white naphtha.

White laundry, crystal white.

Octagon.

Yellow rosin laundry, Lenox.

Sodium silicate.

50. Essential oils, flavoring and perfumery materials class (20 series):

Balsam, Peru.

Benzoin gum, Siam.

Musk, natural.

Oils of—

Cassia.

Bergamot.

Cedar leaf.

Cedar wood.

Eucalyptus, Australia.

Lavender flowers.

Lemon.

Neroli, petale.

Orange, sweet, Italian.

Peppermint.

Rose.

Sassafras.

Wintergreen (sweet birch).

Wormwood.

Orris root, Florentine.

Vanilla beans.

Vanillin.

51. Wood distillation products and naval stores class (4 series):

Acetic acid, 28 per cent, in barrels.

Acetone oil.

Rosin, grade F.

Turpentine, spirits of.

52. Natural dyestuffs and tanning chemicals class (18 series):

Raw materials—

Divi-divi.

Fustic sticks.

Gambier, common or spot, ex-store.

Hemlock bark.

Logwood sticks.

Oak bark.

Sumac, Sicily, 29 per cent tannin.

Quercitron bark.

Manufactured materials—

Chestnut extract.

Dextrine, domestic potato.

Fustic extract, solid.

Hemlock bark, extract, 25 per cent tannin.

Indigo, Bengal.

Logwood extract, solid.

52. Natural dyestuffs and tanning chemicals class (18 series)—Continued.

Manufactured materials—Continued.

Oak bark extract.

Quercitron extract, 51°.

Sodium bichromate.

Turkey red oil.

53. Coal tar crudes, dyes and intermediates class (18 series):

Coal tar crudes—

Creosote oil.

Benzol, pure white.

Naphthaline, refined flakes.

Solvent naptha.

Coal tar intermediates—

Aniline oil.

Beta-naphthol.

Paranitraniline.

Phenol, U. S. P. crystals (carbolic acid).

Salicylic acid.

Coal tar dyes—

Bismark brown (2R) No. 284.

Chrysoidine R (No. 34).

Chrysoidine Y (No. 33).

Direct black, No. 462.

Indigo, synthetic, No. 874.

Nigrosine, spirit soluble, blue shade, No. 698.

Nigrosine, water soluble, blue shade, No. 700.

Orange II (No. 145).

Scarlet, 2 R (No. 82).

54. Drugs and pharmaceuticals class (27 series):

Aspirin, Bayer.

Antipirine.

Aloes, cape.

Acetphenitidin.

Acetanilid, C. P.

Belladonna root.

Bismuth subnitrate.

Castor oil, 1, or AA.

Cream of tartar crystals.

Cocaine hydrochloride, large crystals.

Citric acid crystals.

Camphor, Japanese refined.

Calomel, U. S. P. (mercurous chloride).

Digitalis, domestic.

Iodine, resublimed.

Lanolin, anhydrous.

Licorice root.

Menthol.

Morphine sulphate.

Nux Vomica.

Opium gum.

Quinine sulphate.

Salol.

Sodium bromide, granular.

Strychnine sulphate.

Tartaric acid, crystals.

Thymol.

55. Proprietary preparations class (23 series):

An antiseptic wash.

An ant-acid.

A disinfectant.

A cathartic.

A digestive remedy.

Cough remedy No. 1.

Cough remedy No. 2.

A facial cream.

A hair tonic.

A headache remedy.

Laxative—

No. 1.

No. 2.

No. 3.

Liniment—

No. 1.

No. 2.

Mouth wash.

Prepared food.

Purgative.

Salve.

Talcum powder.

Tonic—

No. 1.

No. 2.

Tea.

56. Explosives class (10 series):

Commercial explosives—

Dynamite, 40 per cent N. G.

Dynamite, 40 per cent L. F. Am.

Powder F. F. F., black.

Military explosives—

Ammonium nitrate.

Picric acid.

Powder—

Smokeless, foreign cannon (water dried).

Smokeless, United States military rifle (air dried) -

Phenol.

Trinitrotoluol, crude, melting point 76°.

Trinitrotoluol, refined, melting point 79.6° to 80°.

57. Miscellaneous organic chemicals class (12 series):

Ether.

Hexamethylenetetramine.

Hydroquinone.

Lactic acid, 22 per cent.

Oxalic acid.

Pyrogallic acid.

Solvents—

Alcohol, denatured.

Alcohol, grain, 190 proof.

Amyl acetate.

Carbon bisulphide.

Chloroform.

Fusel oil, amyl alcohol.

(3) THE SERIES OF THE PRICE SECTION INDEX NUMBER CONSIDERED CONTROLLED.**FOOD GROUP.****8. Feed and forage class (22 series):**

Corn chop.

Corn—

Kafir, No. 3, white.

Mixed, cash, No. 3.

Feed, molasses alfalfa.

Meal—

Alfalfa, new choice.

Cottonseed.

Linseed.

Molasses, black strap.

Hay—

Alfalfa, No. 2.

Clover, No. 1.

Clover, mixed, No. 1.

Johnson grass, No. 2.

Prairie, No. 2.

Wild oat.

Choice, tame oat.

Timothy, No. 2.

Fancy wheat.

Hulls, cottonseed, loose.

Oats, cash, No. 3, white.

Straw—

Oat.

Rye.

Wheat.

9. Wheat and wheat products class (12 series):

Biscuit, social tea.

Bread, loaf, before baking.

Cake, Regina, pound, raisin, and plain.

Crackers—

Graham.

Soda, in boxes.

Cream of wheat.

Flour, wheat, standard patents.

Macaroni.

Mill feeds—

Bran.

Middling, standard, 100-pound jute sacks.

Shorts, mixed.

Wheat, No. 2, red winter, cash.

10. Corn and corn products class (6 series):

Corn, yellow, cash, No. 3.

Corn meal, white, in bulk.

Corn oil, crude, in 400-pound barrels.

Cornstarch, powdered, in bags.

Corn sirup, 43° crystal, in 100-pound barrels.

Hominy grits, in bulk, carload lots.

11. Oats, buckwheat, and rice class (9 series):**Buckwheat.****Flour—**

Aunt Jemima pancake.

Buckwheat.

Gold medal.

Teco pancake.

Oats, No. 3, white, cash.

Oatmeal, carload lots.

Rice—

Honduras head, domestic, clean.

Japanese head, domestic, clean.

12. Barley, hops, rye, and their products class (4 series):

Barley, fair to good.

Malt, western grade, standard.

Rye, No. 2, Minneapolis.

Rye flour, pure, medium straight.

13. Sugar and related products class (9 series):

Corn, No. 3, yellow.

Glucose, 42° mixing.

Molasses, fancy, blended, in barrels.

Sugar—

Beet, refined, standard granulated.

Cane, raw, 96° centrifugal.

Cane, refined, fine granulated, in bags or barrels.

Cane, refined, granulated, in cartons, cased.

Cane, refined, cubes, in barrels.

Cane, refined, No. 7, soft, brown, in barrels.

14. Vegetables and truck class (15 series):**Beans—**

Navy, or pea, dried.

Pinto, dried.

Dried, unclassified.

Cabbage—

Fresh, unclassified.

Fresh, white, Danish.

Corn, New York standard, canned.

Onions, fresh, unclassified.

Peas—

Fresh, shelled.

Canned, No. 3 sieve.

Peanuts—

Dried, unclassified.

Dried, shelling stock, or grade No. 3.

Potatoes—

Fresh, white, unclassified.

Fresh, sweet, unclassified.

Tomatoes—

Fresh, canners' stock.

Canned, standard.

15. Edible vegetable oils class (13 series):

Beans, soya.

Butter, cocoa, in bulk.

15. Edible vegetable oils class (13 series)—Continued.

Cottonseed.

Copra, in bags.

Lard substitutes, in barrels.

Oil—

Coconut, crude, in tank cars.

Cottonseed, crude, in tank cars.

Cottonseed, prime, summer yellow, in barrels.

Corn, crude, in barrels.

Corn, refined, in barrels.

Palm kernel, crude.

Soya bean, crude, in barrels.

Olive, edible.

16. Fruits, nuts and wine class (10 series):

Apples—

Average of all varieties.

Baldwin.

Ben Davis.

Dried.

Bananas, Jamaica.

Lemons, California.

Oranges, California—Valencias and navels.

Peaches, dried, California, choice.

Prunes, dried, California, 60-70.

Raisins, dried, choice, seeded.

18. Tea, coffee, and cocoa class (9 series):

Coffee—

Caracas, washed.

Colombian, Bogotas.

Costa Rica, fair to good.

Cucuta, fair to good.

Hayti, unwashed.

Mocha, small.

Padang, interior.

Rio, No. 7.

Santos, No. 4.

20. Live stock, meats and fats class (48 series):

Bacon—

Short, clear sides, smoked, loose.

Rough sides, smoked, loose.

Breakfast, loose.

Beef—

Fresh native sides.

No. 1 plate.

Salt, extra mess.

Cows, choice to prime.

Hams, smoked, loose.

Heifers, choice to prime.

Hogs—

Dressed.

Live, bulk of sales.

Live, carload lots.

Live, light to heavy.

Heavy fair to choice heavy shipping and heavy butcher.

Common to choice light bacon, and fair to fancy select butchers.

20. Live stock, meats and fats class (48 series)—Continued.

Lambs—

Good to prime.

Carload lots.

Lamb, dressed, round.

Lard—

Compound, in tierces.

Leaf.

Pure leaf, kettle rendered, tierces.

Prime, steam, loose.

Prime, contract.

Stearine.

Margarine, standard, high-grade.

Meat, mutton, dressed.

Mutton, legs.

Pork loins.

Pork, salt mess.

Sheep—

Prime.

Carload lots.

Ewes.

Wethers.

Oleomargarine, standard, uncolored, pound carton.

Oleo oil, extra.

Steers—

Feeding, 790 to 839 pounds.

Feeding, 940 to 989 pounds.

Choice to prime, heavy beefs.

Good to choice, corn-fed.

Native beef.

1,180 to 1,229 pounds.

Good native, fresh carcass.

Steer—

Chucks, No. 1.

Loins, No. 1.

Rounds, No. 1.

Tallow, packers' prime.

Veal calves, prime, live.

Veal, city dressed, good to prime.

21. Poultry and dairy products class (43 series):

Butter:

Creamery—

Extra, San Francisco.

Extra, Philadelphia.

Seconds, New York.

Firsts, New York.

Fancy, New Orleans.

Extra, New York.

Elgin.

Centralized firsts, Cincinnati.

Firsts, Chicago.

Extra, firsts.

Extra, Chicago.

Seconds, Boston.

Extra, Boston.

21. Poultry and dairy products class (43 series)—Continued.

Butter—Continued.

Whole milk, extra, at Cincinnati.

Cheese—

Whole milk, American twins.

New York State, full cream, large colored.

Colored.

California, flats, fancy.

Flats, average and fancy.

Long horn.

Chickens, broilers, western, combed.

Ducks.

Eggs—

Average, fresh, best, St. Louis.

Average, best, fresh, New York.

Candled, western, New Orleans.

Firsts—

Western, Boston.

Fresh, Chicago.

Fresh, Cincinnati.

Fresh gathered, New York.

Extra, western, Philadelphia.

Selected, pullets.

Fowls—

Live, Chicago.

Live, choice, New York.

Dressed, western killed, corn fed.

Dressed, western, dry picked, and packed.

Turkeys—

Dressed, iced.

Live.

Milk—

Fresh, Chicago.

Grade B, New York.

Fresh, San Francisco.

Evaporated.

Sweetened, condensed.

Oleomargarine.

22. Fish and oysters class (14 series):

Bluefish.

Carp.

Cod.

Flounder.

Haddock.

Hake.

Halibut, western white.

Herring, lake.

Mackerel, Spanish

Salmon.

Salmon, mild cured.

Salmon, pink, No. 1 talls, canned.

Sardines, ½-oils, keyless, canned.

Trout, lake.

CLOTHING GROUP.

23. Cotton and cotton products class (57 series):

Cotton goods:

Damask, bleached, 64-inch.

Denim, Amoskeag, 28-inch, 2.20-yard.

Drilling, Massachusetts D standard, 30-inch, 2.85-ounce.

Duck—

Sail, numbered, firsts, 22-inch, No. 6.

Standard, United States Army, firsts, 28½-inch, 8-ounce.

Shelter tent, first quality, 35½-inch, 1.90-yard.

Wide, numbered, firsts, 60-inch, No. 8.

Cotton linters—

Grade A, cut 25–40.

Grade B, cut 45–75.

Grade C, cut 80–125.

Grade D, cut 130–175.

Cotton manufactures—

Bags, 2 bushel, Amoskeag, 16-ounce.

Blankets, 90-inch, colored, 2 pounds to pair, 54 by 74.

Calico, American standard, 28-inch, 64 by 64.

Cambric, Lonsdale.

Cashmere, cotton warp, 36-inch.

Cotton, absorbent, Maplewood grade.

Flannels, unbleached, 31½-inch, 3½ yards.

Gauze, bandage, bleached, 36-inch, 20 by 12.

Gauze, Brunswick, bleached, 36-inch, 20 by 12.

Gingham, Lancaster, 26½-inch, 6.5 yards.

Lawn, 40-inch, 88 by 80, 8.5 yards.

Mattress, Anchor, from linters, 4/6 by 6/4, 45 pounds.

Percalé, 36 inches, 5.35 yards.

Print cloths—

39-inch, 72 by 76, 4.25 yards.

27-inch, 64 by 60, 7.60 yards.

Sateen, 39-inch, 72 by 120, 3.50 yards.

Sheeting—

Brown, 36-inch, 44 by 48, 2.85 yards.

Brown, 36-inch, Ware Shoals LL, 4 yards.

Bleached, 90-inch, Wamsutta, S. T.

Shirting—

Bleached, 36-inch, 76 by 84, 3.90 yards, in gray.

Muslin, 36-inch, Rough Rider, 4 yards.

Rope, first grade, 1½-inch.

Tape, No. 7118, 60 by 38.

Ticking, Amoskeag, A. C. A. 32-inch, 2.05 yards.

Tire fabric, 17½-ounce, Egyptian, carded.

Thread, cotton, 6-cord, white, 200-yard spool.

Towels, Terry, 22 by 44 and 83 by 32.

Twil, 29.5-inch, 104 by 48, 2.15 yards.

Twine, wrapping, first grade.

Seed, cotton.

Waste, cotton, Osnaburg.

23. Cotton and cotton products class (57 series)—Continued.**Cotton manufactures—Continued.****Yarns—**

Carded, white, northern mule spun, 22/1, cones.

Carpet, short staple, 8/3 warp, twist slack.

Hosiery—

Long staple, 10/1, combed, C. C. hosiery, twist, cones.

Short staple, 30/1, northern carded, double roving mule spun.

Weaving—**Short staple—**

10/1 carded, white, northern mule spun, cones.

16/2, southern 2 ply skein.

Long staple—

24/1, eastern peeler cones, carded.

36/1, eastern peeler cones, combed.

50/2, eastern peeler cones, combed.

60/2, eastern peeler cones, combed.

70/2, eastern peeler cones, combed.

80/2, eastern peeler cones, combed.

Egyptian twist, 60/1.

Egyptian, single, 70/1, skeins, combed.

Sea Island, 80/1, combed.

24. Wool and woolen products class (21 series):**Raw materials—****Domestic wool—**

Ohio, fine, unwashed, delaine.

Ohio, three-eighths blood, unwashed.

Ohio, one-fourth blood, unwashed.

Territory, staple, F. and F. M., scoured basis.

Territory, combing, one-half blood.

Imported wool—

Australian, choice Sydney and Geelong, merinos, 64s, scoured basis.

Australian, choice Sydney and Geelong, merinos 70s, scoured basis.

Chinese, China ball, No. 2, open grain basis.

South American—**Buenos Aires—**

36s, grain basis, 28 per cent shrinkage.

40/44 grain basis, 30 per cent shrinkage.

46s, grain basis, 34 per cent shrinkage.

Montevideo—

50s, grain basis, 35 per cent shrinkage.

South African—

58/60s, scoured basis.

60/64s, scoured basis.

70s, scoured basis.

Substitutes—**Clopes—**

Blue worsted.

Reworked blue serge.

Kags, graded—

Blue serge.

Light skirted cloth.

Light worsted.

Rags, A shoddy, reworked blue serge.

25. Silk and silk products class (2 series):

Waste silk—

Japan, best white Frisons.

Japan, pierced cocoons.

26. Hides and skins and their products class (60 series):

Cattle hides—

Country—

Branded.

Cows, heavy.

Steers, No. 1, 60 pounds, and up.

Imported—

Bogota.

Vera Cruz.

Imported dry—

Packer.

Puerto Cabella, 21 to 23 pounds, selected.

Tuxpam, 20 to 27 pounds, selected.

Vera Cruz, 18 to 19 pounds, selected.

Packer—

Cows—

Branded.

Light native.

Native, over 55 pounds.

Steers—

Butt branded.

Extreme light Texas.

Heavy native.

Light Texas.

Spready.

Calfskins---

Country.

Country kips--

Kips No. 1, 15 to 25 pounds.

Selected, 5 to 7 pounds.

Selected, 7 to 9 pounds.

Selected, 9 to 12 pounds.

Green, trimmed to butchers—

No. 1.

No. 2.

New England -

4 to 5 pounds.

5 to 7 pounds.

7 to 9 pounds.

9 to 12 pounds.

12 to 16 pounds.

16 pounds and up.

Selected—

5 to 7 pounds.

7 to 9 pounds.

9 to 12 pounds.

Goatskins—

Amritsars—

1,000 pounds to 500 skins.

1,110 pounds to 500 skins.

1,200 pounds to 500 skins.

26. Hides and skins and their products class (60 series)—Continued.

Goatskins—Continued.

Brazil, first selection.

Rio Hache.

San Luis Zacatecas.

Sheep and lambskins—

Country—

Lambs.

Sheep and shearlings.

Imported—

Capeskins, glove.

Lambs, Greek and Macedonian.

Lambskins, Spanish.

Mochas.

Packer—

Lambs.

Sheep and shearlings.

Horsehides, country.

Leather, cattle hide—

Belting butts—

Light standard tannages.

Heavy standard tannages.

Medium standard tannages.

No. 1 heavy.

Harness leather—

Grade B. California oak.

Grade 2.

Sole leather—

Buenos Aires, dry hide, hemlock. M. W., reject second grade.

Buenos Aires, dry hide, hemlock, O. W., 2d grade.

Hemlock packer slaughter, No. 1.

Hemlock slaughter, No. 1, best tannages.

No. 1 scoured oak bends, all weights.

No. 1 scoured oak backs, all weights.

RUBBER, PAPER, AND FIBERS GROUP.

30. Rubber and rubber products class (10 series):

Rubber, crude—

African, Niger flake.

Brazilian Para—

Cameta.

Upper Caucho Ball.

Upriver, coarse.

Upriver, fine.

Centrals, Guayule—

Corinto scrap.

20 per cent, guaranteed.

Plantation Hevea—

First latex crepe.

Fine smoked sheets, ribbed.

Rubber substitute—

Gutta joolatong.

31. Paper class (1 series):

News print rolls, car lots.

32. Fibers and fiber products class (10 series):**Raw materials—**

Kapk, prime Japara.

Manila—

Fair, current shipment.

Good, current shipment.

Midway, shipment.

Manufactured product—**Binder twine—**

Manila, 600 feet to the pound.

Pure manila, 650 feet to the pound.

Standard manila or extra, 550 feet to the pound.

Standard, 500 feet to the pound.

White sisal, 500 feet to the pound.

Burlap, 40-inch, 10½-ounce, Calcutta.

METALS GROUP.**33. Iron and steel and their products class (36 series):****Raw materials and slightly manufactured products—****Iron ore—**

Mesabi Bessemer, 55 per cent.

Mesabi non-Bessemer, 51½ per cent.

Coke, Connellsville furnace, f. o. b. ovens.

Pig iron—

Basic.

Bessemer.

Foundry, No. 2 southern.

Scrap, steel—

Heavy melting.

No. 1 railroad wrought.

Billets, steel—

Bessemer.

Open-hearth.

Bars—

Iron, common, from mill, Pittsburgh.

Sheet steel, Bessemer.

Sheet steel, open-hearth.

Steel.

Shapes, steel, structural.

Plates, steel, tank.

Manufactured products—**Rails, steel—**

Bessemer, standard.

Open-hearth, standard.

Spikes, steel—

Standard railroad.

Skelp, grooved.

Pipe, cast iron, 6-inch.

Hoops, steel.

Sheets—

Black, No. 28.

Blue annealed, No. 10.

Galvanized, No. 28.

33. Iron and steel and their products class (36 series)—Continued.

Manufactured products—Continued.

Tin plate, domestic coke, 14 by 20 inches.

Wire rods, Bessemer.

Wire fence—

Plain, annealed, Nos. 0 to 9.

Barbed, galvanized.

Calk, toe, blunt and medium, 1 prong.

Chains, American coil.

Nails—

Cut, eightpenny, fence and common.

Wire, eightpenny, fence and common.

Rivets, button head, structural.

Screws, wood, 1-inch, No. 10, flat head.

Shoes, horse and mule.

34. Ferro-alloys, nonferrous and rare metals class (13 series):

Aluminum—

98 to 99 per cent, contract price.

98 to 99 per cent, open market.

Copper—

Electrolytic.

Lake.

Lead, pig.

Nickel, ingot.

Nickel, shot and ingot.

Zinc, sheet.

Quicksilver.

Ferromanganese, 80 per cent.

Manganese ore, 49 per cent.

Platinum, refined ingots.

Silver, fine.

FUELS GROUP.

35. Coal and coke class (27 series):

Coal—

Anthracite, f. o. b. New York—

Chestnut.

Egg.

Pea.

Steam.

Stove.

Bituminous (districts in which produced)—

Cartersville and Franklin, Ill. (2 series).

Clinton, Ill. (2 series).

Eastern Kentucky (2 series).

Georges Creek, Md. (2 series).

Hocking, Ohio (2 series).

Mount Olive, Ill. (2 series).

Pittsburgh, No. 8, Ohio (2 series).

Springfield, Ill. (2 series).

Standard, Ill. (2 series).

Western Kentucky (2 series).

Coke—

Birmingham.

Connellsville.

36. Petroleum and petroleum products class (5 series):

Crude petroleum--

California, at wells.

Gulf, barrel, 42-gallon, at wells.

Illinois.

Mid-continent.

Pennsylvania.

BUILDING MATERIALS GROUP.

38. Clay products class (3 series):

Brick, common.

Tile—

Hollow, building.

Hollow blocks, standard size.

39. Sand and gravel class (8 series):

Sand—

Building.

Building, coke and engine.

Fine building.

Foundry.

Fire and furnace.

Glass.

Molding.

Gravel.

41. Cement class (6 series):

Cement, Portland (markets)—

New York.

New England and Middle States.

Illinois.

Indiana.

Ohio, Indiana, Illinois, and Michigan.

Western Washington.

43. Lumber class (24 series):

Douglas fir--

1s and 2s, 1-inch.

No. 2 and better, drop siding, 1/6.

No. 1 common, S1S, 1 by 8 inch and 10-inch.

1s and 2s, 2-inch.

Hemlock, eastern—

No. 1 boards, S1S, 1 by 8 inch by 16 feet.

No. 1 fencing, S1S, 1 by 16 inch.

No. 1 piece stuff, S1S1E, 2 by 4 inch by 16 feet.

Timbers, rough, 4 by 4 inch to 8 by 8 inch by 16 feet.

Pine, southern yellow—

Finish B and better, 6-inch and wider.

Common boards, No. 1, S2S, 1 by 10 inch.

Common boards, No. 2, S2S, 1 by 8 inch.

No. 1, S1S1E, 2 by 8 inch by 16 feet.

Timbers, S1S1E, 6 by 8 inch by 16 feet.

Spruce—

Boards--

Covered, 5-inch and up.

Matched.

43. Lumber class (24 series)—Continued.

Spruce—Continued.

Bundled furring, 2-inch.

Frames—

8-inch and under.

9-inch and under.

10-inch.

11 or 12 inch.

Random—

2 by 3; 2 by 4.

2 by 8.

2 by 10.

2 by 12.

44. Paints and varnishes class (1 series):

Soya bean oil.

CHEMICALS GROUP.

45. Mineral acids class (6 series):

Nitrate of soda, 95 per cent.

Nitric acid, 42° Baumé.

Pyrites, urn size, lump ore wash.

Sulphuric acid—

60° Baumé.

66°.

Sulphur, brimstone, stick, crude.

46. Heavy chemicals class (3 series):

Bleaching powder, 35 per cent chlorine.

Caustic soda, 76 per cent, spot.

Soda ash, light, 58 per cent, spot.

47. Miscellaneous inorganic chemicals class (2 series):

Ammonia, liquid anhydrous, in cylinders.

Arsenic, white.

48. Fertilizers class (25 series):

Acid phosphate, 16 per cent phosphoric acid.

Bones—

Raw ground, 4 per cent ammonia and 50 per cent bone phosphate.

Ground, steamed, 1½ per cent ammonia and 60 per cent bone phosphate.

Carbonate of potash, calcined, 80 to 85 per cent.

Cottonseed meal.

Cyanamid, 22 per cent ammonia.

Dried blood, 12 to 13 per cent ammonia.

Fish scrap, dried, 11 per cent ammonia, and 14 per cent bone phosphate.

Hoofmeal.

Kainit.

Manure salt.

Manure salt, double, 48 to 53 per cent basis.

Muriate of potash, 80 to 85 per cent.

Nitrate of soda, 95 per cent.

Sulphate of ammonia.

Sulphate of potash, 90 to 95 per cent.

Tankage—

Garbage.

Slaughterhouse, concentrated, 14 to 15 per cent ammonia.

Slaughterhouse, crushed, 9 and 20 per cent.

48. Fertilizers class (25 series)—Continued.**Phosphate rock—**

Florida, high grade, hard, 77 per cent.

Florida land pebble, 68 per cent.

Tennessee, domestic, 78 to 80 per cent.

Pyrites, urn size, lump ore wash.

Sulphuric acid, 60°.

Sulphur, brimstone, stick, crude.

49. Soaps and glycerin class (21 series):**Fats and oils—**

Degras, American.

Grease—

Brown.

House.

Oil—

Coconut, domestic, in tanks.

Corn, crude, in barrels.

Cottonseed, crude, in tank cars.

Menhaden, southern.

Palm, Lagos.

Red.

Soya bean.

Whale, natural, winter.

Olive.

Soapstock, cottonseed oil, loose—

65 per cent f. a.

50 per cent f. a.

Stearine—

White grease, loose.

Yellow grease, loose.

Tallow--

Packers', No. 1.

Packers', No. 2.

Other materials—

Caustic soda.

Glycerine—

Dynamite, carload lots, drums included.

C. P., in bulk.

51. Wood distillation products and naval stores class (5 series):

Acetone.

Acetate of lime.

Alcohol, wood, refined, 95 per cent.

Methyl acetone.

Ethyl methyl ketone.

52. Natural dyestuffs and tanning chemicals class (1 series):

Quebracho, extract, solid.

53. Coal tar crudes, intermediates and dyes class (1 series):

Toluol, pure.

56. Explosives class (9 series):

Aqua ammonia, 20 per cent.

Cotton linters.

Glycerine, dynamite.

Nitrate of soda, 95 per cent.

56. Explosives class (9 series)—Continued.

Nitric acid, 42° Baumé.

Powder, smokeless, Army and Navy, cannon, air dried.

Powder, smokeless, American, cannon, water dried.

Sulphuric acid, 66° Baumé.

Toluol.

57. Miscellaneous organic chemicals class (2 series):

Carbon tetrachloride.

Formaldehyde.

3. THE CHAIN INDEXES OF CONTROLLED AND UNCONTROLLED PRICES.

Perhaps no statistical measure is more significant for making broad economic interpretations of the effects of price control upon war-time prices than a series of controlled and uncontrolled price index numbers. The outstanding shortcoming of such index numbers is, however, that no single device can be made to answer several general queries with accuracy. The so-called controlled index number for the period 1913–1918 by necessity includes commodities as controlled from the beginning of 1913, while none were actually controlled until August, 1917, and while all did not come under control until the signing of the armistice. It is, therefore, an excellent measure of the war-time price movement of the so-called controlled commodities or the uncontrolled commodities, but a crude measure of the immediate effects of each regulation as it came on. To show these effects more accurately, there has been devised a chain index of controlled prices showing each month, for all prices under control by the end of the month, the per cent of rise or fall from the prices of the identical commodities in the month preceding. There has been made, too, a like chain of uncontrolled prices. This schedule permits, by reason of its changing base, the gradual transfer of commodities from the uncontrolled list to the controlled list. The controlled list, which increases from month to month, and the uncontrolled list, which decreases in exact degree, are thus strictly accurate for each month. There is, so far as known, no more precise statistical measure of the immediate effects of regulation upon prices than the chain index of controlled and uncontrolled commodities constructed here.¹

¹ The task of constructing a chain index of 1,366 commodities from April, 1917, to December, 1918, in view of the volume of transfers from the uncontrolled to the controlled list after September, 1917, was a prodigious one. It involved the separate handling of thousands of 8 and 9 figure aggregates, which do not show in the completed index, anew each month. Some few liberties were necessarily taken, and combinations of series were sometimes entered together during the same month in order to reduce the calculations involved. These few cases were considered with care, however, and it is believed that the general result is as satisfactory as any that could be made. The chronological order in which commodities were transferred from the uncontrolled to the controlled list follows:

1917.

September.—Coal, coke, copper, wheat, iron ore, pig iron, steel bars, steel shapes, steel plates.

October.—Steel blooms and billets, sheet bars, wire rods, skelp, sugar.

November.—Steel sheets, pipe, steel scrap, tinplate, lead, corn, oats, barley, fresh vegetables, vegetable oils, live stock, poultry, fish, fresh fruits, southern or yellow pine, ammonia, smokeless cannon powder.

December.—Douglas fir, wood distillation products, cement, remainder of iron and steel class.

The chain index, which was made simply to find whether Govern-
ment regulation affected current war prices, was made to begin in

April, 1917. The "all commodities" chain index, and that for each group and class figured, contains its full lot of commodities from the month of our entrance into war until the first month of regulation. The whole lot of commodities were then separated, more and more each month as regulation was extended, into those controlled and uncontrolled. The "all commodities" chain index in April, 1917, for example, contains 1,366 commodities. But regulation soon began and in September the commodities were separated into 50 controlled and 1,316 uncontrolled. Each month thereafter, until the cessation of hostilities, the

Weighted chain index for prices.—"All commodities" (1,366 series) controlled and uncontrolled during the war, showing changes as control is extended. (Controlled, 0-573 series; uncontrolled, 1,366-793 series.)

extension of regulations necessitated the transfer of certain series from the uncontrolled list to the controlled list. By October, 1918, the original 1,366 uncontrolled commodities had been separated into 573 controlled series and 793 uncontrolled prices.

1918.

January.—Nitrate of soda, all fertilisers excepting sulphur and sulphuric acid.

February.—Zinc, formaldehyde, toluol, arsenic, animal feeds, coffee.

March.—Aluminum, binder twine, manila fiber.

April.—Spruce, hemlock, nickel, quicksilver, silver, newsprint paper, caustic soda, soda ash, bleaching powder, carbon tetrachloride.

May.—Wool, hides and skins, rubber, platinum metals, manganese ore, cotton linters, quebracho.

June.—Sulphuric acid, nitric acid, sulphur, harness leather.

July.—Cotton goods and cotton yarns, brick, building tile, sand and gravel.

August.—Woolen rags, glycerin, sole and belting leather, crude petroleum, kapok.

September.—Silk waste.

October.—Burlap.

To repeat, the chain index of controlled and that of uncontrolled commodities for each class figured, each group, and "all commodities," represents a series of percentages of the aggregate rise or fall each month by comparison with prices of the identical commodities during the preceding month. For example, when 16 additional series were brought under control in October, 1917, they were not compared simply with the 50 series that made up the list of controlled commodities for September. But, in order to be strictly accurate, new September aggregates were figured for September using the whole 66 series which by the end of October were under control. It was thus found that the weighted prices of the 66 series under control during October, by reason presumably of extended regulation, fell 14.78 per cent below the corresponding 66 price series for September, when only 50 of them were regulated. And, by the same process, it was found that the remaining 1,300 series still uncontrolled in October, rose 1.11 per cent above their own level for September. Each controlled commodity was taken out of the uncontrolled list and put into the controlled list in the month when control began. The chain index of controlled commodities throughout, therefore, is a comparison of prices during the month when regulation began with the prices of identical commodities in the month before, and the uncontrolled index is a comparison of prices still uncontrolled by the end of each month with identical series for the month preceding.¹

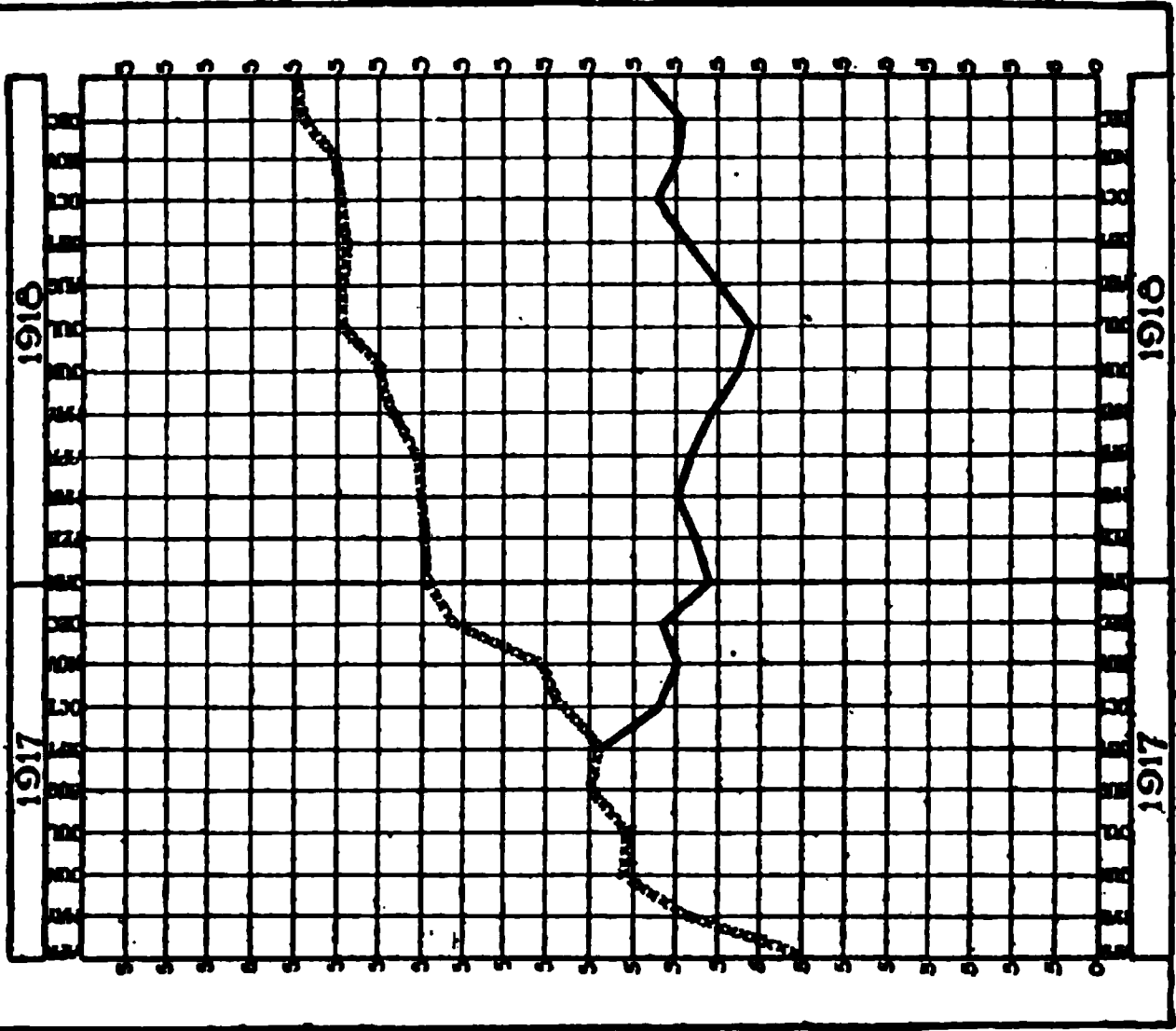
The 1,366 commodities, which went into the "all commodities" chain index, each month rose steadily higher than their level of the month before until August, 1917. And from September on until the signing of the armistice the commodities that were not under control moved steadily upward in price. But each month some of these uncontrolled commodities were put under regulation and there is a marked difference in the behavior of the chain index of controlled commodities. The Government had begun to control prices in earnest by September, and the September controlled prices fell 8.05 per cent below their own August level while those under control in October fell 14.78 per cent below their own September level. It is of especial note that while the uncontrolled index continued upward from our declaration of war to the signing of the armistice, the controlled index made an enormous drop at the beginning of control, and from November, 1917, held relatively stable.

The behavior of the food group chain index, significantly, is very like that of "all commodities" in which it has a large weighting. The clothing group chain index shows that the controlled series went somewhat higher in their monthly rises between May and September,

¹ A fuller commercial description of each of the above series of commodities, which were all taken from the Price Section index number, may be had by a study of the list of controlled commodities selected previously for the controlled index number.

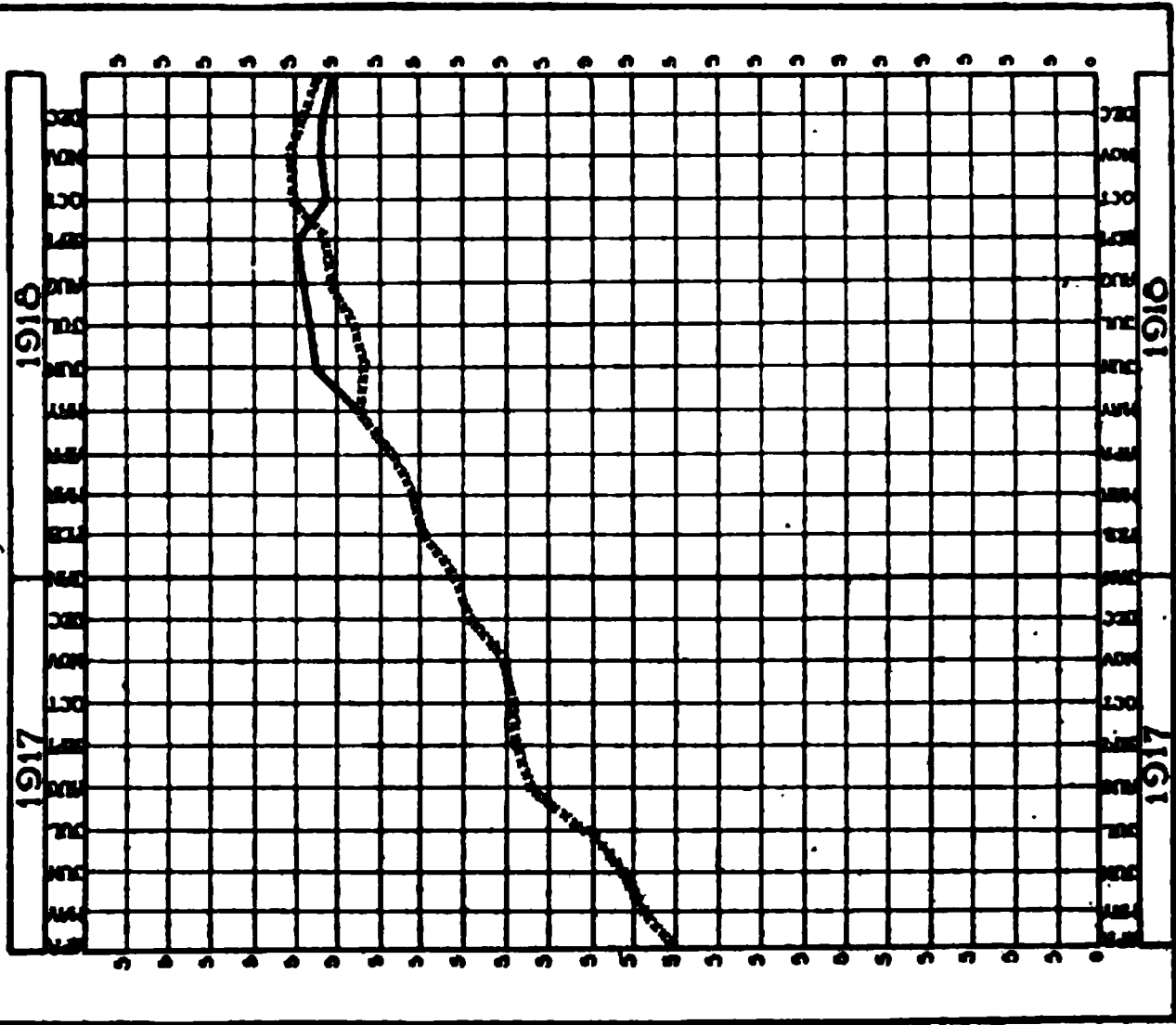
1918, than those not under control, and then fell below. The outstanding features of the chain index for the metals group are the extent to which prices were scaled from previous heights and the strength with which they were held afterward. Metal prices, in September, 1917, were brought 9.32 per cent below their August level; in October they were brought 24.82 per cent below their September level; and in November they were brought 9.68 per cent below their October level. Metal prices, once reduced to this lower level, show scarcely the variation of 1 per cent up to the signing of the armistice. The fuels group chain index shows a fairly stable price movement except for the enormous increase of 20.9 per cent in April, 1918, the beginning of the new "coal year" when the annual contracts, under which a very large proportion of all coal mined is sold, were reversed.

WEIGHTED CHAIN INDEX FOR PRICES OF
FOOD GROUP
260 SERIES
CONTROLLED & UNCONTROLLED
DURING THE WAR.
SHOWING CHANGES AS CONTROL IS EXTENDED
— CONTROLLED 0-214 SERIES
--- UNCONTROLLED 260-54 SERIES

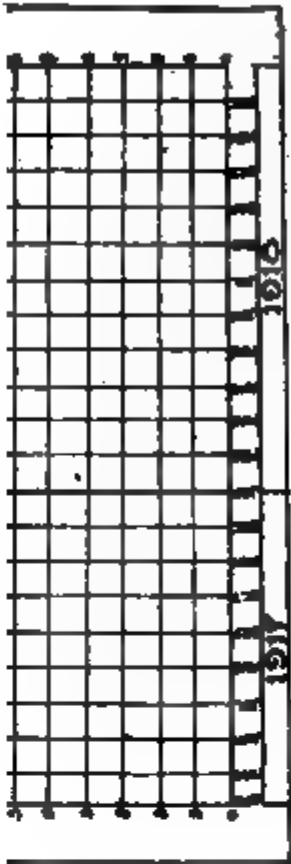


Weighted chain index for prices.—Food group (260 series) controlled and uncontrolled during the war, showing changes as control is extended. (Controlled, 0-214 series; uncontrolled, 260-54 series.)

WEIGHTED CHAIN INDEX FOR PRICES OF
CLOTHING GROUP
409 SERIES
CONTROLLED & UNCONTROLLED
DURING THE WAR
SHOWING CHANGES AS CONTROL IS EXTENDED
— CONTROLLED 0-140 SERIES
--- UNCONTROLLED 409-269 SERIES

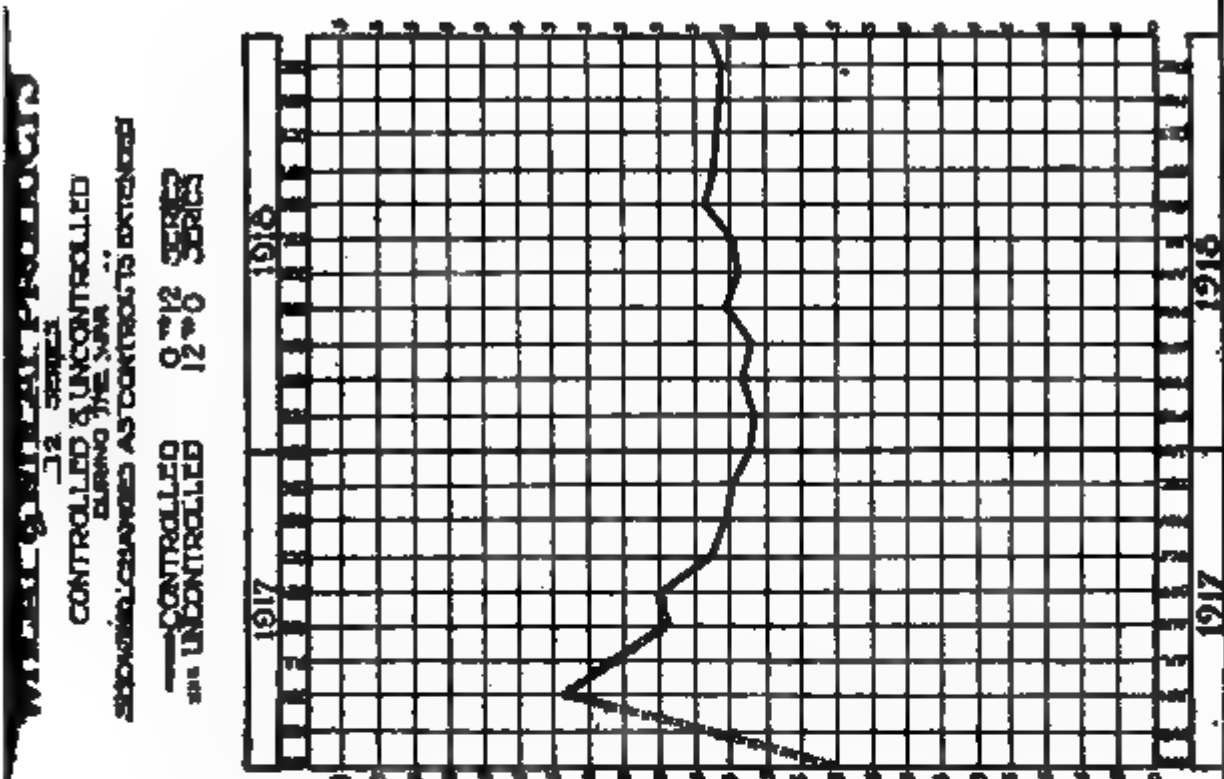


Weighted chain index for prices.—Clothing group (409 series) controlled and uncontrolled during the war, showing changes as control is extended. (Controlled, 0-140 series; uncontrolled, 409-269 series.)

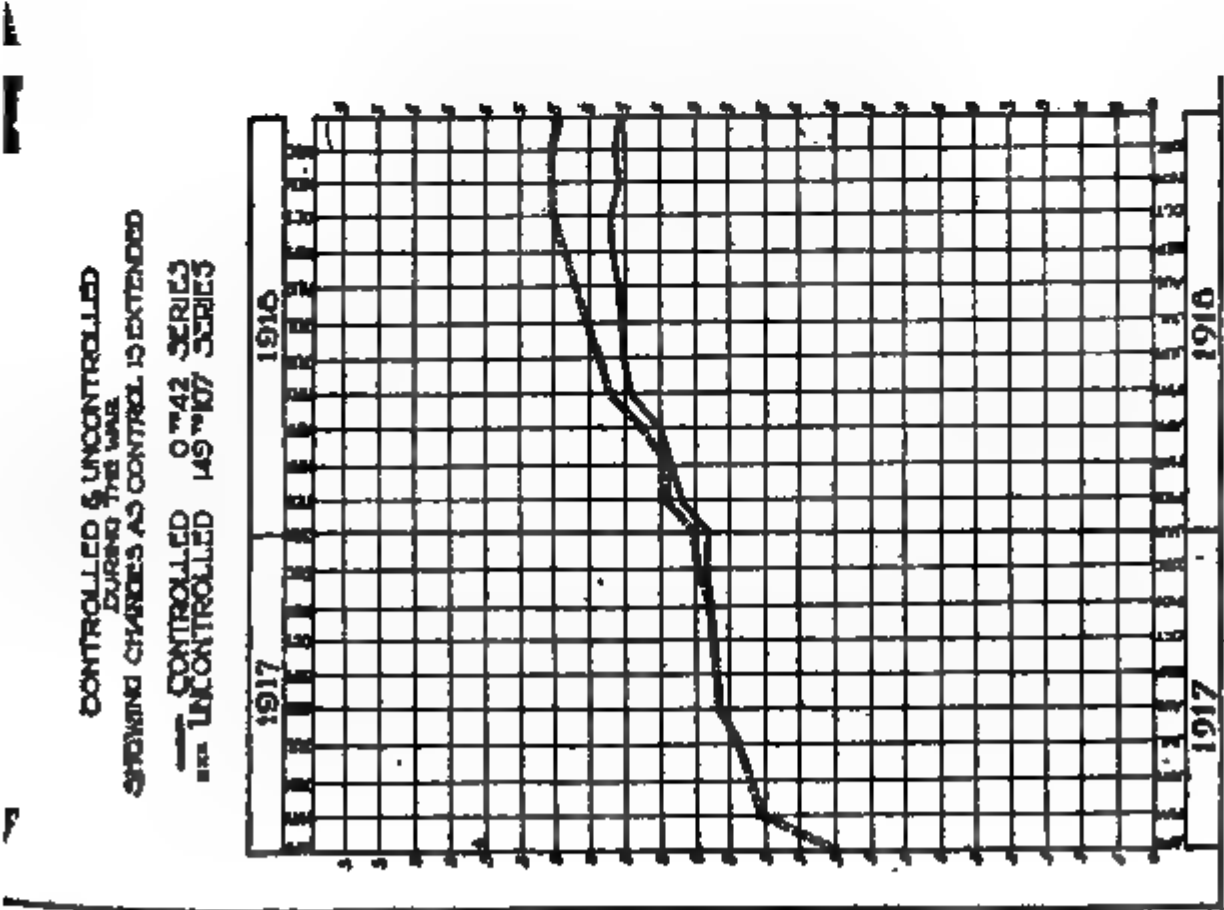


Weighted, controlled prices (see notes) controlled prices

Weighted, controlled prices (see notes) controlled prices



Weighted chain index for prices.—Wheat and wheat products (12 series) controlled and uncontrolled during the war, showing changes as control is extended. (Controlled, 0-12 series; uncontrolled, 12-0 series.)



Weighted chain index for prices.—Building materials group (149 series) controlled and uncontrolled during the war, showing changes as control is extended. (Controlled, 0-42 series; uncontrolled, 149-107 series.)

WEIGHTED CHAIN INDEX FOR PRICES OF WOOL & WOOLEN PRODUCTS

66 SERIES

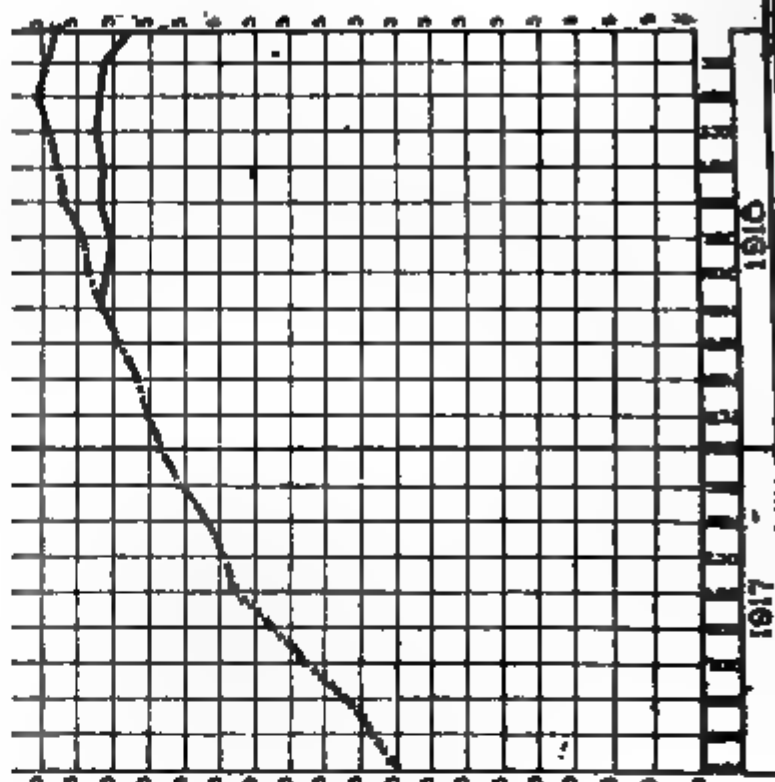
CONTROLLED & UNCONTROLLED

- DURING THE YEAR

SHOWING CHANGES AS CONTROL IS EXTENDED

--- CONTROLLED 0-21 SERIES

--- UNCONTROLLED 66-45 SERIES



WEIGHTED CHAIN INDEX FOR PRICES OF WOOL AND WOOLEN PRODUCTS (66 SERIES)

WEIGHTED CHAIN INDEX FOR PRICES OF COTTON & COTTON PRODUCTS

01 SERIES

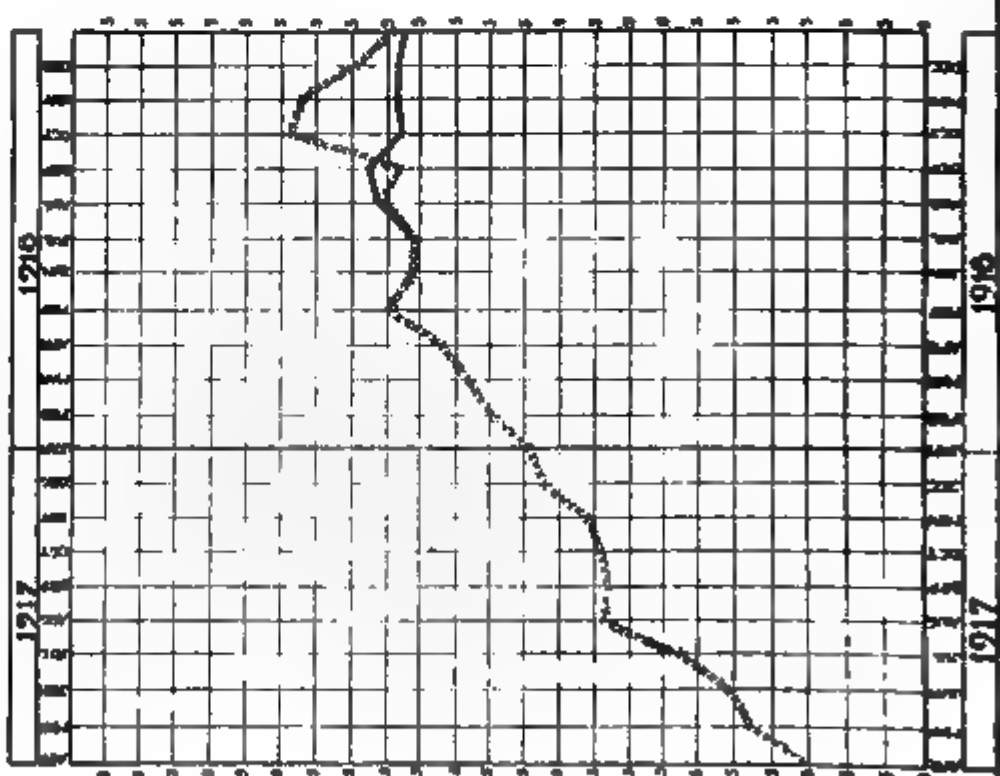
CONTROLLED & UNCONTROLLED

- DURING THE YEAR

SHOWING CHANGES AS CONTROL IS EXTENDED

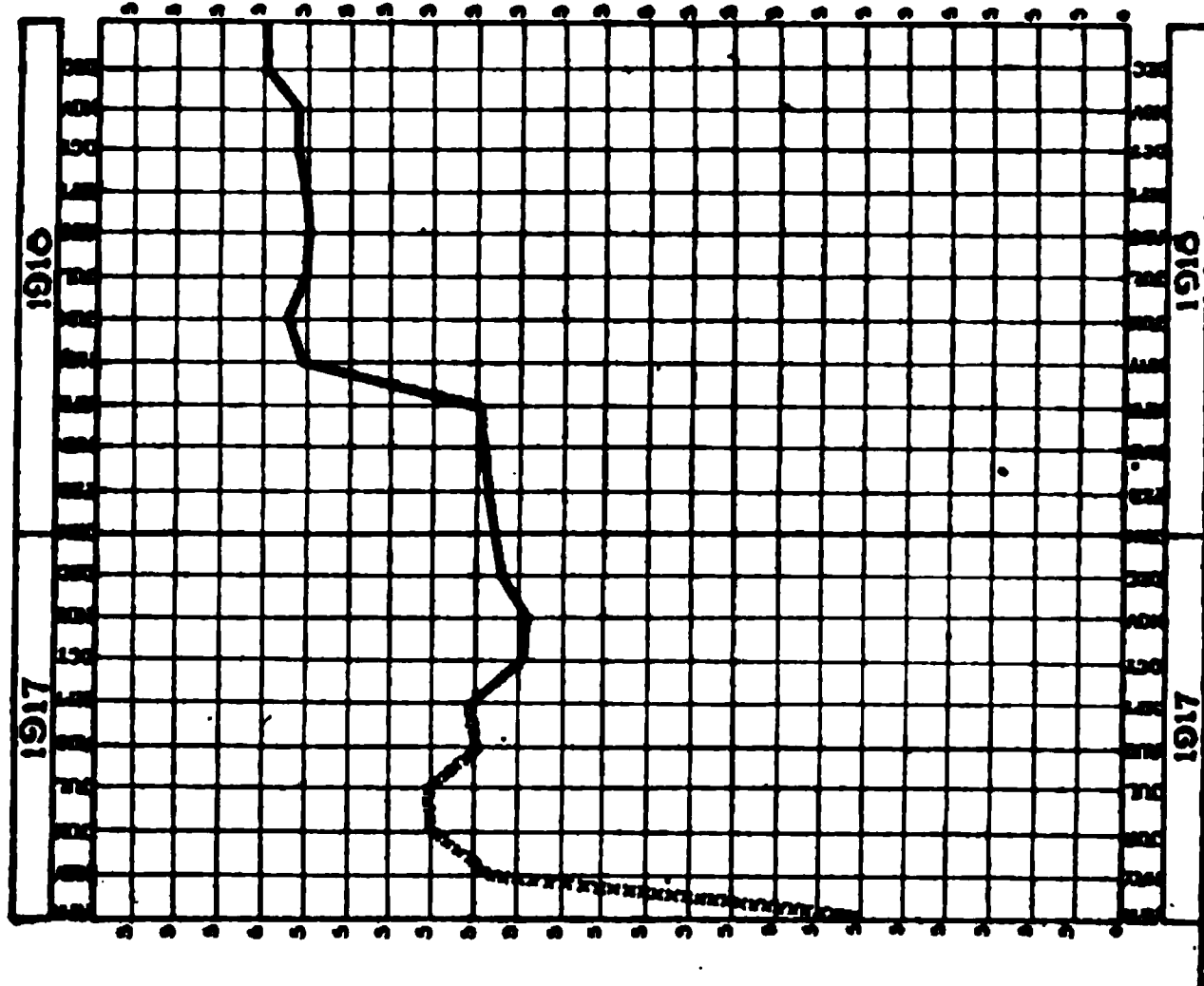
--- CONTROLLED 0-37 SERIES

--- UNCONTROLLED 01-24 SERIES



WEIGHTED CHAIN INDEX FOR PRICES OF COTTON AND COTTON PRODUCTS (01 SERIES)

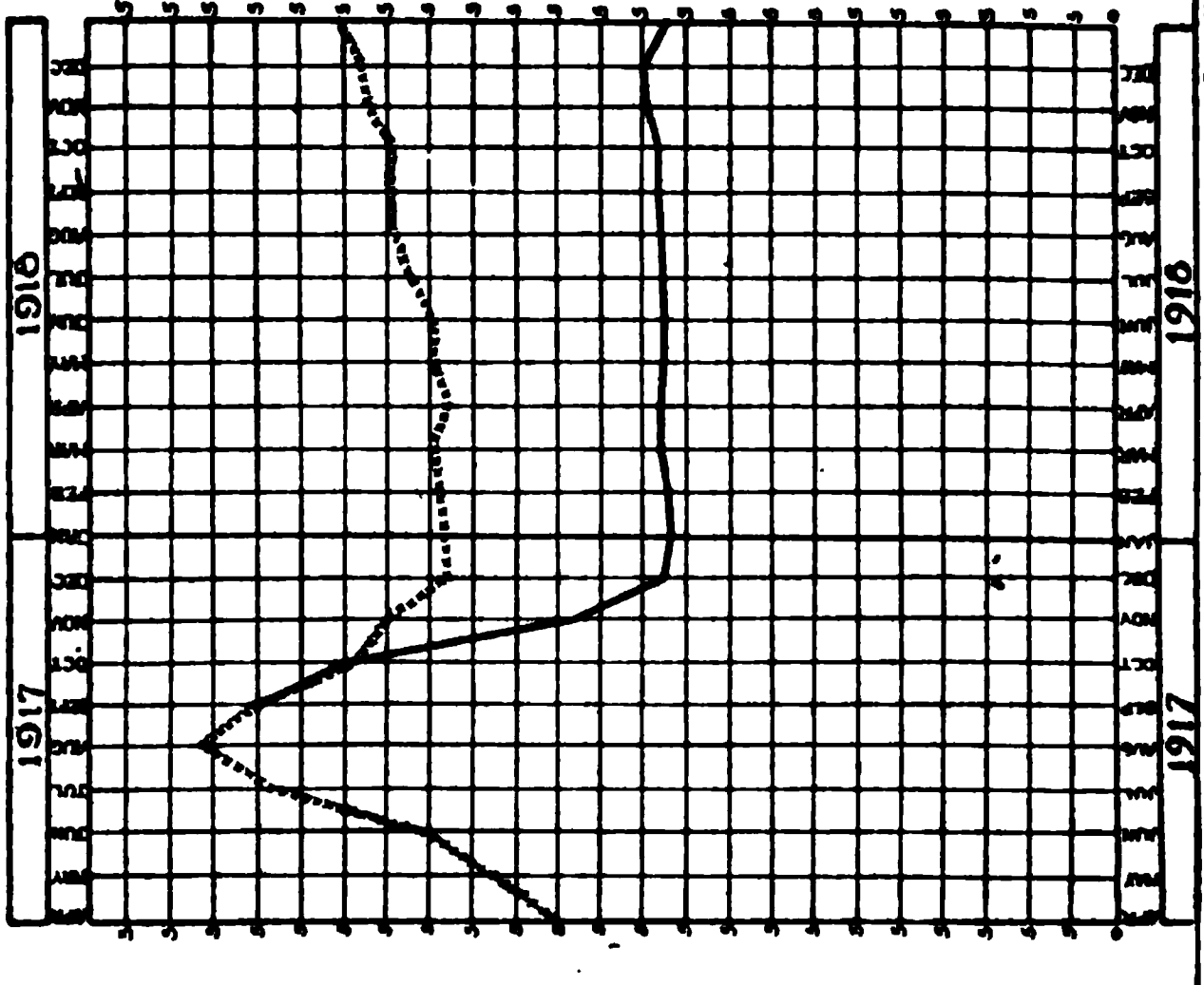
WEIGHTED CHAIN INDEX FOR PRICES OF
COAL & COKE
27 SERIES
CONTROLLED & UNCONTROLLED
DURING THE WAR,
SHOWING CHANGES AS CONTROL IS EXTENDED
— CONTROLLED 0-27 SERIES
--- UNCONTROLLED 27-0 SERIES



U.S. GOVERNMENT PRINTING OFFICE

Weighted chain index for prices.—Coal and coke (27 series) controlled and uncontrolled during the war, showing changes as control is extended. (Controlled, 0-27 series; uncontrolled, 27-0 series.)

WEIGHTED CHAIN INDEX FOR PRICES OF
IRON STEEL & THEIR PRODUCTS
36 SERIES
CONTROLLED & UNCONTROLLED
DURING THE WAR,
SHOWING CHANGES AS CONTROL IS EXTENDED
— CONTROLLED 0-36 SERIES
--- UNCONTROLLED 36-52 SERIES



U.S. GOVERNMENT PRINTING OFFICE

Weighted chain index for prices.—Iron, steel, and their products (36 series) controlled and uncontrolled during the war, showing changes as control is extended. (Controlled, 0-36 series; uncontrolled, 36-52 series.)

CHAIN INDEX OF CONTROLLED AND UNCONTROLLED PRICES.
[Showing weighted rise or fall, by per cents, of controlled and uncontrolled prices for each month of the war.]

All commodities.					Food group.				
Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.	Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.
		1917.					1917.		
.....	1366	April with March..	.....	+9.73	.....	268	April with March..	.....	+12.21
.....	1366	May with April....	.....	+4.44	.....	268	May with April....	.....	+7.38
.....	1366	June with May.....	.....	+4.13	.....	268	June with May.....	.....	-.79
.....	1366	July with June.....	.....	+4.23	.....	268	July with June.....	.....	+4.20
.....	1366	August with July..	.....	-1.61	.....	268	August with July..	.....	-1.35
50	1316	September with August.	-8.05	+1.94	12	256	September with August.	-7.19	+4.75
66	1300	October with Sep- tember.	-14.78	+1.11	21	247	October with Sep- tember.	-1.95	+1.92
266	1100	November with October.	-.12	+3.64	185	83	November with October.	+1.83	+10.24
294	1072	December with November.	-4.60	+1.75	185	83	December with November.	-5.77	+3.35
		1918.					1918.		
318	1048	January with De- cember, 1917.	+1.25	+1.73	185	83	January with De- cember, 1917.	+1.46	+.45
352	1014	February with Jan- uary.	+1.66	+.98	214	54	February with Jan- uary.	+1.99	+.36
362	1004	March with Feb- ruary.	-.90	+1.66	214	54	March with Feb- ruary.	-1.17	+.40
387	979	April with March..	-1.53	+3.30	214	54	April with March..	-2.83	+2.33
469	897	May with April....	-2.22	+.74	214	54	May with April....	-3.24	+1.53
481	885	June with May.....	-1.45	+1.42	214	54	June with May.....	-1.85	+4.26
545	821	July with June.....	+2.83	+1.42	214	54	July with June.....	+4.05	-.15
570	796	August with July..	+2.25	+.50	214	54	August with July..	+3.03	-.04
572	794	September with August.	+2.43	+2.08	214	54	September with August.	+3.80	+.52
573	793	October with Sep- tember.	-1.63	+.51	214	54	October with Sep- tember.	-2.48	+.06
573	793	November with October.	-.27	-.49	214	54	November with October.	-.53	+2.59
573	793	December with November.	+2.06	-1.04	214	54	December with November.	+4.00	+.42

Clothing group.					Rubber, paper, and fiber group.				
Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.	Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.
		1917.					1917.		
.....	409	April with March..	.....	+3.36	.....	119	April with March..	.....	+2.59
.....	409	May with April....	.....	+2.07	.....	119	May with April....	.....	+1.65
.....	409	June with May.....	.....	+4.15	.....	119	June with May.....	.....	-.23
.....	409	July with June.....	.....	+6.41	.....	119	July with June.....	.....	-1.78
.....	409	August with July..	.....	+1.58	.....	119	August with July..	.....	-.18
.....	409	September with August.	.....	+.03	.....	119	September with August.	.....	+4.16
.....	409	October with Sep- tember.	.....	+.85	.....	119	October with Sep- tember.	.....	-.36
.....	409	November with October.	.....	+4.01	.....	119	November with October.	.....	-.49
.....	409	December with November.	.....	+1.51	.....	119	December with November.	.....	-.45
		1918.					1918.		
.....	409	January with De- cember, 1917.	.....	+3.20	.....	119	January with De- cember, 1917.	.....	+2.16
.....	409	February with Jan- uary.	.....	+1.11	.....	119	February with Jan- uary.	.....	0.00
.....	409	March with Feb- ruary.	.....	+2.01	8	111	March with Feb- ruary.	-0.26	+.92
.....	409	April with March..	.....	+3.95	9	110	April with March..	+.70	+4.23
67	342	May with April....	+4.89	-.39	19	100	May with April....	+4.93	+4.54
69	340	June with May.....	+.38	+.92	19	100	June with May.....	+.11	+1.70
122	287	July with June.....	+.87	+2.78	19	100	July with June.....	+.60	-.61
138	271	August with July..	+.69	+.13	20	99	August with July..	-1.54	+.92
140	269	September with August.	-3.16	+3.81	20	99	September with August.	+.05	-.02
140	269	October with Sep- tember.	+.45	+.54	21	98	October with Sep- tember.	-4.41	+.23
140	269	November with Oc- tober.	-.23	-1.78	21	98	November with Oc- tober.	-2.42	-.03
140	269	December with No- vember.	-1.26	-1.78	21	98	December with No- vember.	-2.63	-.73

CHAIN INDEX OF CONTROLLED AND UNCONTROLLED PRICES—Continued.

[Showing weighted rise and fall, by per cents, of controlled and uncontrolled prices for each month of the war.]

Metals group.					Fuels group.				
Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.	Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.
1917.					1917.				
.....	116	April with March..	.....	+ 5.22	.....	63	April with March..	.....	+17.83
.....	116	May with April.....	.....	+ 6.53	.....	63	May with April.....	.....	+ 3.96
.....	116	June with May.....	.....	+14.15	.....	63	June with May.....	.....	+ .72
.....	116	July with June.....	.....	+ 5.59	.....	63	July with June.....	.....	- 1.67
.....	116	August with July..	.....	- 6.14	.....	63	August with July..	.....	+ .24
11	105	September with August.	- 9.32	- 9.46	27	36	September with August.	- 6.07	+ 5.05
18	98	October with Sep- tember.	-24.82	- 4.83	27	36	October with Sep- tember.	- .20	+ .17
25	90	November with October.	- 9.68	- 3.00	27	36	November with October.	+ 2.63	+ .68
39	77	December with No- vember.	- .39	- 1.25	27	36	December with No- vember.	+ .70	+ 1.96
1918.					1918.				
39	77	January with De- cember, 1917.	+ .16	- .95	27	36	January with De- cember, 1917.	+ .88	+ 3.52
40	76	February with Jan- uary.	+ .39	- 1.14	27	36	February with Jan- uary.	+ .19	+ 1.17
42	74	March with Febru- ary.	- .15	+ 1.99	27	36	March with Febru- ary.	+ .56	+ 1.37
46	70	April with March..	- .40	- 1.07	27	36	April with March..	+20.90	+ 3.47
49	67	May with April.....	+ .07	+ 4.09	27	36	May with April.....	+ 1.13	+ 3.46
49	67	June with May.....	+ .22	+ .98	27	36	June with May.....	- 2.39	+ .87
49	67	July with June.....	+ .86	+ 3.35	27	36	July with June.....	- .16	- .48
49	67	August with July..	+ .47	+ 5.13	32	31	August with July..	+ .34	+ .15
49	67	September with August.	+ .01	- .40	32	31	September with August.	+ 1.17	+ .45
49	67	October with Sep- tember.	+ 1.10	- .60	32	31	October with Sep- tember.	0.00	0.00
49	67	November with October.	+ .11	- 1.81	32	31	November with October.	+ 2.53	- 1.56
49	67	December with November	- 2.61	- .51	32	31	December with November.	0.00	- .08
Building materials group.					Chemicals group.				
Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.	Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.
1917.					1917.				
.....	149	April with March..	.....	+10.40	.....	242	April with March..	.....	+2.47
.....	149	May with April.....	.....	+ 1.58	.....	242	May with April.....	.....	+6.46
.....	149	June with May.....	.....	+ 1.65	.....	242	June with May.....	.....	+2.00
.....	149	July with June.....	.....	+ 2.72	.....	242	July with June.....	.....	+2.65
.....	149	August with July..	.....	+ .24	.....	242	August with July..	.....	+1.67
.....	149	September with August.	.....	+ .33	.....	242	September with August.	.....	+4.00
.....	149	October with Sep- tember.	.....	+ .45	.....	242	October with Sep- tember.	.....	+1.06
6	143	November with October.	+0.57	+ 1.15	22	220	November with October.	+2.88	-1.13
16	133	December with November.	- .19	+ .51	27	215	December with November.	+2.54	-1.71
1918.					1918.				
16	133	January with De- cember, 1917.	+3.91	+ 3.71	51	191	January with De- cember, 1917.	+ .74	-4.83
16	133	February with January.	+ .71	- .12	55	187	February with January.	+1.23	+4.43
16	133	March with Feb- ruary.	+1.86	+ 3.12	55	187	March with Feb- ruary.	+ .33	+ .83
31	118	April with March..	+4.26	+ 4.73	60	182	April with March..	- .45	+ .45
31	118	May with April.....	+ .96	+ 1.73	62	180	May with April.....	-1.21	-2.41
31	118	June with May.....	+ .09	+ 1.57	72	170	June with May.....	-1.99	+ .47
42	107	July with June.....	+ .32	+ 1.68	72	170	July with June.....	-7.62	+ .09
42	107	August with July..	+ .93	+ 1.11	75	167	August with July..	-2.33	- .50
42	107	September with August.	+ .09	+ 1.86	75	167	September with August.	+1.19	+ .63
42	107	October with Sep- tember.	-1.47	0.00	75	167	October with Sep- tember.	-1.46	+2.39
42	107	November with October.	+ .53	+ .35	75	167	November with October.	- .36	+ .56
42	107	December with November.	- .35	- 1.03	75	167	December with November.	-9.44	- .95

CHAIN INDEX OF CONTROLLED AND UNCONTROLLED PRICES—Continued.
[Showing weighted rise or fall, by per cents, of controlled and uncontrolled prices for each month of the war.]

Wheat and wheat products.					Cotton and cotton products.				
Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.	Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.
		1917.					1917.		
.....	12	April with March.....		+17.01	.....	81	April with March.....		+ 7.80
.....	12	May with April.....		+20.91	.....	81	May with April.....		+ 2.98
.....	12	June with May.....		- 7.26	.....	81	June with May.....		+ 7.08
.....	12	July with June.....		- 7.07	.....	81	July with June.....		+10.98
.....	12	August with July.....		+ .73	.....	81	August with July.....		- .42
12	.....	September with August.....	- 7.19		.....	81	September with August.....		+ .47
12	.....	October with September.....	- 2.10		.....	81	October with September.....		+ 1.69
12	.....	November with October.....	- .82		.....	81	November with October.....		+ 6.28
12	.....	December with November.....	- 2.64		.....	81	December with November.....		+ 1.91
		1918.					1918.		
12	.....	January with December, 1917.....	- .77		.....	81	January with December, 1917.....		+ 5.08
12	.....	February with January.....	+ 1.41		.....	81	February with January.....		+ 2.29
12	.....	March with February.....	- 1.09		.....	81	March with February.....		+ 2.90
12	.....	April with March.....	+ 3.28		.....	81	April with March.....		+ 7.41
12	.....	May with April.....	- 1.60		4	77	May with April.....	0.00	- 3.37
12	.....	June with May.....	+ .84		4	77	June with May.....	0.00	- .11
12	.....	July with June.....	+ 3.76		57	24	July with June.....	+ 1.33	+ 4.35
12	.....	August with July.....	- 1.04		57	24	August with July.....	+ 1.37	- 2.68
12	.....	September with August.....	- .39		57	24	September with August.....	- 4.85	+15.08
12	.....	October with September.....	- .39		57	24	October with September.....	+ .46	- 1.22
12	.....	November with October.....	- .08		57	24	November with October.....	- .23	- 7.98
12	.....	December with November.....	+ 1.53		57	24	December with November.....	- .96	- 5.71
		Wool and woolen products.					Hides and skins and their products.		
Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.	Con- trolled series.	Un- con- trolled series.	Comparison.	Con- trolled prices.	Un- con- trolled prices.
		1917.					1917.		
.....	66	April with March.....		+3.62	.....	156	April with March.....		-0.66
.....	66	May with April.....		+3.72	.....	156	May with April.....		+ .40
.....	66	June with May.....		+5.51	.....	156	June with May.....		- .26
.....	66	July with June.....		+4.88	.....	156	July with June.....		+3.73
.....	66	August with July.....		+5.44	.....	156	August with July.....		- .76
.....	66	September with August.....		+1.65	.....	156	September with August.....		-2.02
.....	66	October with September.....		+2.26	.....	156	October with September.....		- .06
.....	66	November with October.....		+3.89	.....	156	November with October.....		+1.77
.....	66	December with November.....		+2.39	.....	156	December with November.....		+ .20
		1918.					1918.		
.....	66	January with December, 1917.....		+1.69	.....	156	January with December, 1917.....		+1.93
.....	66	February with January.....		+1.19	.....	156	February with January.....		-2.30
.....	66	March with February.....		+2.65	.....	156	March with February.....		-1.32
.....	66	April with March.....		+2.29	.....	156	April with March.....		+ .34
15	51	May with April.....	-1.66	+1.84	48	108	May with April.....	+10.60	+1.22
15	51	June with May.....	- .24	+ .86	50	108	June with May.....	+ .68	+ .62
15	51	July with June.....	+1.70	+2.50	50	108	July with June.....	- 1.72	+2.50
21	45	August with July.....	- .21	+ .93	60	96	August with July.....	- 1.19	+ .06
21	45	September with August.....	+ .83	+1.20	60	96	September with August.....	+ .70	- .16
21	45	October with September.....	- .21	+1.55	60	96	October with September.....	+ .80	+ .15
21	45	November with October.....	- .41	-1.47	60	96	November with October.....	- .05	+ .79
21	45	December with November.....	-3.53	-1.38	60	96	December with November.....	- 1.03	+ .44

CHAIN INDEX OF CONTROLLED AND UNCONTROLLED PRICES—Continued.

[Showing weighted rise or fall, by per cents, of controlled and uncontrolled prices for each month of the war.]

Iron and steel and their products.					Coal and coke.				
Controlled series.	Un-controlled series.	Comparison.	Controlled prices.	Un-controlled prices.	Controlled series.	Un-controlled series.	Comparison.	Controlled prices.	Un-controlled prices.
1917.					1917.				
.....	88	April with March....	.....	+ 7.69	.....	27	April with March....	.....	+42.78
.....	88	May with April....	.....	+ 7.35	.....	27	May with April....	.....	+ 6.92
.....	88	June with May....	.....	+17.14	.....	27	June with May....	.....	+ .27
.....	88	July with June....	.....	+ 7.45	.....	27	July with June....	.....	- 5.07
.....	88	August with July....	.....	- 6.53	.....	27	August with July....	.....	+ .48
9	79	September with August.	- 9.73	-10.69	.....	27	September with August.	- 6.06	.....
16	72	October with September.	-26.03	- 3.84	.....	27	October with September.	- .17	.....
23	65	November with October.	-10.42	- 6.27	.....	27	November with October.	+ 2.69	.....
36	52	December with November.	- .44	+ .13	.....	27	December with November.	+ .74	.....
1918.					1918.				
36	52	January with December, 1917.	+ .10	+ .51	27	.....	January with December, 1917.	+ .84	.....
36	52	February with January.	+ .41	+ .33	27	.....	February with January.	+ .24	.....
36	52	March with February.	- .03	- 1.55	27	.....	March with February.	+ .52	.....
36	52	April with March....	- .52	+ 1.12	27	.....	April with March....	+20.91	.....
36	52	May with April....	- .01	+ .15	27	.....	May with April....	+ 1.14	.....
36	52	June with May....	+ .11	+ 2.52	27	.....	June with May....	- 2.39	.....
36	52	July with June....	+ .11	+ 1.42	27	.....	July with June....	- .18	.....
36	52	August with July....	+ .49	+ .44	27	.....	August with July....	+ .43	.....
36	52	September with August.	+ .02	- .13	27	.....	September with August.	+ .99	.....
36	52	October with September.	+ 1.23	+ 2.61	27	.....	October with September.	+ .002	.....
36	52	November with October.	+ .13	+ .68	27	.....	November with October.	+ 3.48	.....
36	52	December with November.	- 2.53	+ 2.09	27	.....	December with November.	0.00	.....

Lumber.					Fertilizers class.				
Controlled series.	Un-controlled series.	Comparison.	Controlled prices.	Un-controlled prices.	Controlled series.	Un-controlled series.	Comparison.	Controlled prices.	Un-controlled prices.
1917.					1917.				
.....	62	April with January....	.....	+22.98	.....	25	April with March....	.....	+ 1.94
.....	62	May with April....	.....	.....	.....	25	May with April....	.....	+ 3.09
.....	62	June with May....	.....	.....	.....	25	June with May....	.....	+ 6.48
.....	62	July with April....	.....	+ 4.56	.....	25	July with June....	.....	+ 4.21
.....	62	August with July....	.....	.....	.....	25	August with July....	.....	+ 7.83
.....	62	September with August.	.....	.....	.....	25	September with August.	.....	+ .98
.....	62	October with July....	.....	+ 1.39	.....	25	October with September.	.....	+ 4.91
5	57	November with October.	.....	.....	.....	25	November with October.	.....	- 2.64
9	53	December with November.	.....	.....	.....	25	December with November.	.....	+ 5.12
1918.					1918.				
9	53	January with December, 1917.	+5.26	+ 3.67	22	3	January with December, 1917.	+ .68	- 1.53
9	53	February with January.	.....	.....	22	3	February with January.	+3.12	+14.53
9	53	March with February.	.....	.....	22	3	March with February.	- .17	+ 2.55
24	38	April with January....	+5.63	+ 6.72	22	3	April with March....	+2.38	0.00
24	38	May with April....	.....	.....	22	3	May with April....	+1.22	-25.12
24	38	June with May....	.....	.....	25	0	June with May....	-1.52	.....
24	38	July with April....	- .60	+ .82	25	0	July with June....	-4.06	.....
24	38	August with July....	.....	.....	25	0	August with July....	+1.02	.....
24	38	September with August.	.....	.....	25	0	September with August.	-3.41	.....
24	38	October with July....	-2.58	+ .30	25	0	October with September.	-1.51	.....
24	38	November with October.	.....	.....	25	0	November with October.	+ .12	.....
24	38	December with November.	.....	.....	25	0	December with November.	-1.63	.....

4. RELATIVE POINTS BELOW WHICH 50 BASIC COMMODITIES WERE PEGGED.

One of the primary motives behind price control during the war was the desire to stimulate a maximum production. The various committees, though always desirous of holding prices within reasonable bounds, were anxious primarily to assure a full output and did so frequently by means of liberal price allowances. They undertook to meet these ends by a rather extensive regulation over the prices of important basic raw materials. The Government early regulated wheat, and then as occasion demanded it extended control to various other raw materials such as copper, iron ore, pig iron, lumber, wool, hides and skins, and cotton yarns. A study of the schedules of these fixed prices, gives a very poor notion of the relative market heights at which each regulation began, both with respect to its own prewar level and with respect to that of other controlled prices. It is of significance to know whether Government interference with prices began generally at the same relative heights, or whether other factors dictated the time and character of the Government control. Another equally significant inquiry is the relation which the fixed prices bore to the market prices prevailing at the time regulation set in.

There have here been chosen from the whole list of 573 controlled commodities 50 of the most representative individual price series which typify the common practices of Government regulation. The actual market prices at wholesale by months from January, 1913, through December, 1918, for each of these controlled basic commodities, have been turned into relative prices by making the average prewar price (July 1, 1913, to June 30, 1914) equal 100. Each relative price thus is strictly comparable with any other. Relative prices of this character, for those who seek simply the relation of any market price when Government control began, to its corresponding prewar price are more accurate than the index numbers or chain indexes of groups and classes. The relative prices of individual raw materials controlled, for the point in mind, have the decided advantage of standing as separate series precisely at the height they had attained when taken hold of by the Government. They, moreover, are free from weights and permit of a study of price rises pure and simple. These devices make readily possible a comparison of the relative points, above their prewar prices, below which any or all of the 50 selected commodities were pegged.

The market price for calfskins, No. 1, country, 8 to 15 pounds, at Chicago, for example, was \$0.1984 per pound (made equal to 100) before the war in Europe. It had reached \$0.4040 per pound (found equal to 204 when compared with the prewar price) in May, 1918,

when the Government determined upon control of calfskin prices. The Government set the price at \$0.34 per pound (similarly found equal to 171). It is clear that while the market had sent calfskin prices from 100 in 1913-14 to 204 by May, 1918, the Government then fixed them at a maximum of 171. They were in point of fact, quoted subsequently at figures above this maximum. Data are given by which one may make for himself a similar analysis for each of the 50 commodities carried. A summary of the relative price of each commodity before the European war, the relative market price which prevailed when the Government determined upon regulation, and the relative price at which the Government fixed its initial price precedes the fuller tables of individual commodities.

The 50 individual commodities, which were selected from the lot of 573 controlled in price and the actual prices of which may be had from the Price Section's class bulletins, follow with their full commercial descriptions:

I. FOOD GROUP.

1. Bacon, rough sides, smoked loose, Chicago.
2. Beef, good native steers, fresh carcass, Chicago.
3. Cattle, steers, choice to prime, heavy beeves, Chicago.
4. Corn, cash, No. 3 yellow, Chicago.
5. Cottonseed oil, crude, in barrels, f. o. b. mill.
6. Hogs, live (bulk of sales), Chicago.
7. Oats, No. 3, white, cash, Chicago.
8. Rice, Honduras head, domestic, clean, New Orleans.
9. Sugar, 96° centrifugal, New York.
10. Wheat, No. 1 northern spring, Minneapolis.

II. CLOTHING GROUP.

11. Calfskins, No. 1 country hides, 8 to 15 pounds, Chicago.
12. Cattle hides, packer, heavy native steers, Chicago.
13. Cotton duck, standard United States Army, firsts, 28½-inch 8-ounce, commercial.
14. Cotton linters, grade D, cut 130-175, New York.
15. Cotton yarn, weaving, carded, white, northern mulespun, 22/1 cones, Boston.
16. Leather, harness, grade B, California oak, Chicago.
17. Leather, belting, butts, medium standard tannages, Philadelphia.
18. Print cloths, 27-inch, 64 by 60, 7.60 yards, Boston.
19. Rags, woolen, new clips, blue worsted, New York.
20. Sheeting, Ware Shoals, L. L., brown, New York.
21. Wool, domestic, Ohio, Pennsylvania, West Virginia, unwashed, fine delaine, Boston.
22. Wool, Buenos Aires, 46s, shrinkage 34 per cent, Boston.

III. RUBBER, PAPER, AND FIBER GROUP.

23. Manila fiber, fair current shipment, New York.
24. Paper, newsprint, rolls, car lots, United States average.
25. Rubber, crude, Hevea, first latex crêpe, New York.

IV. METALS GROUP.

26. Copper, electrolytic, New York.
27. Iron ore, Mesabi Non-Bessemer, 51½ per cent, lower lake ports.
28. Lead, pig, New York.
29. Pig iron, basic, Mahoning or Shenango Valley furnace.
30. Quicksilver, New York.
31. Steel bars, base, Pittsburgh.
32. Steel billets, open hearth, Pittsburgh.
33. Steel plates, tank, Pittsburgh.
34. Steel structural shapes, Chicago.
35. Tin plates, domestic coke, 14 by 20 inches, Pittsburgh.
36. Zinc sheets, f. o. b. La Salle or Peru, Ill.

V. FUELS GROUP.

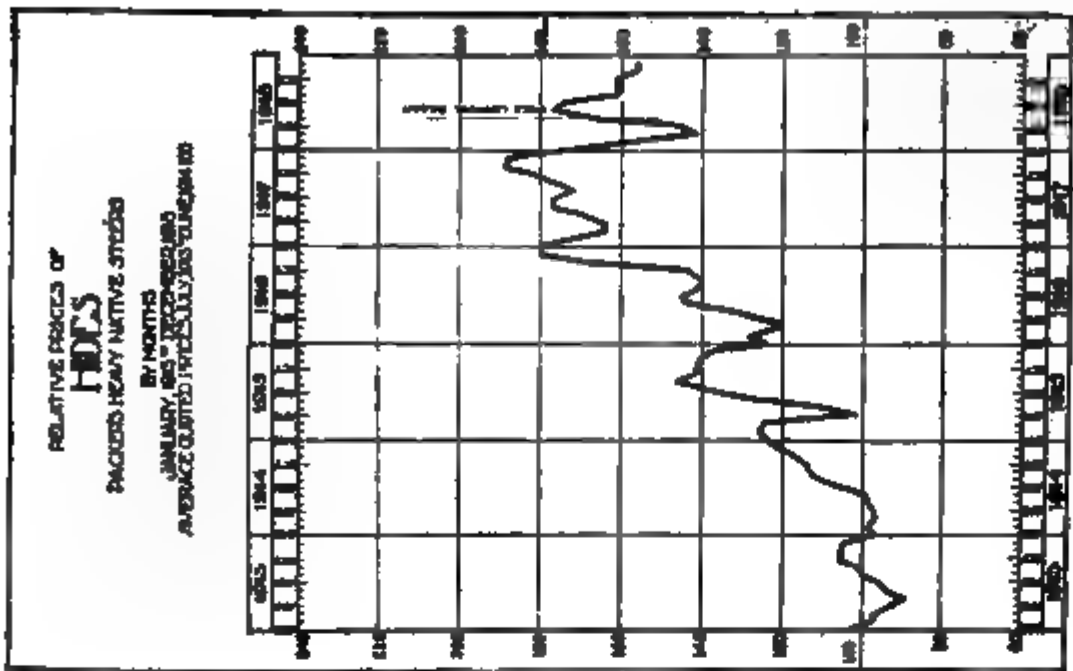
37. Coal, anthracite, chestnut, New York.
38. Coal, bituminous, Pittsburgh, No. 8 Ohio, Columbus and Detroit.
39. Coke, Connellsville furnace, f. o. b. ovens.
40. Petroleum, crude, Mid-continent (Kansas-Oklahoma), at wells.

VI. BUILDING MATERIALS GROUP.

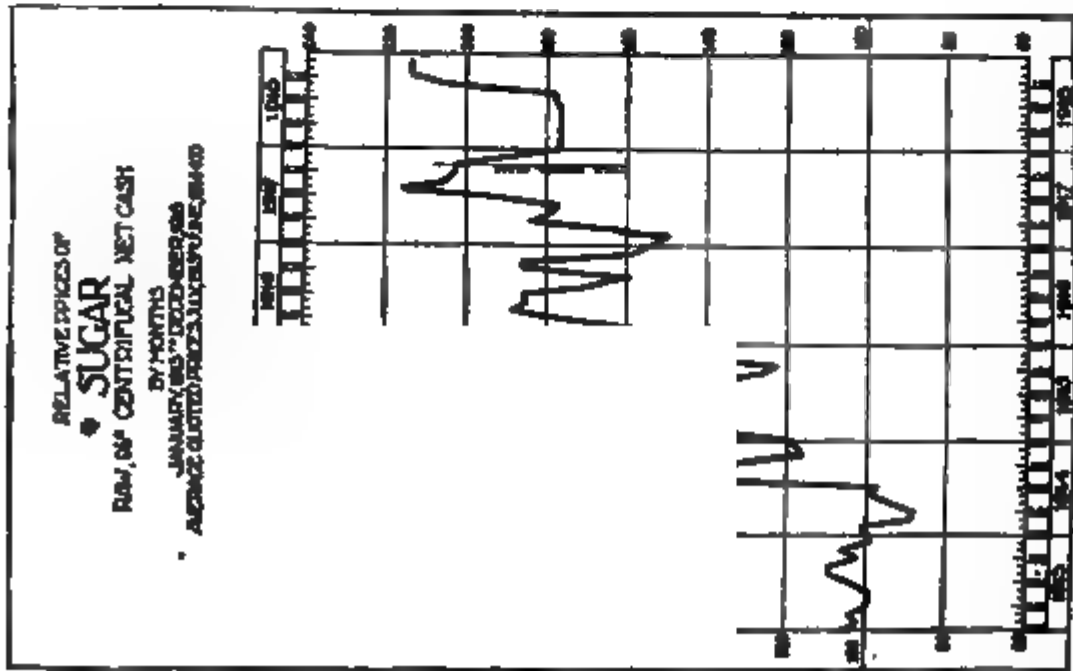
41. Cement, Portland domestic, New York.
42. Douglas fir, common, No. 1, 1 by 8 by 10, Washington mills.
43. Pennsylvania hemlock, No. 1 boards, 1 by 10 to 16, f. o. b. mill.
44. Southern or yellow pine, common boards, No. 1 S2S, 1 by 10, Arkansas.
45. Spruce, random, 2 by 10, Boston.

VII. CHEMICALS GROUP.

46. Alcohol, wood, refined, 95 per cent, New York.
47. Arsenic, white, New York.
48. Caustic soda, 76 per cent, spot, New York.
49. Nitrate of soda, 95 per cent, New York.
50. Sulphuric acid, 60° Be., New York.

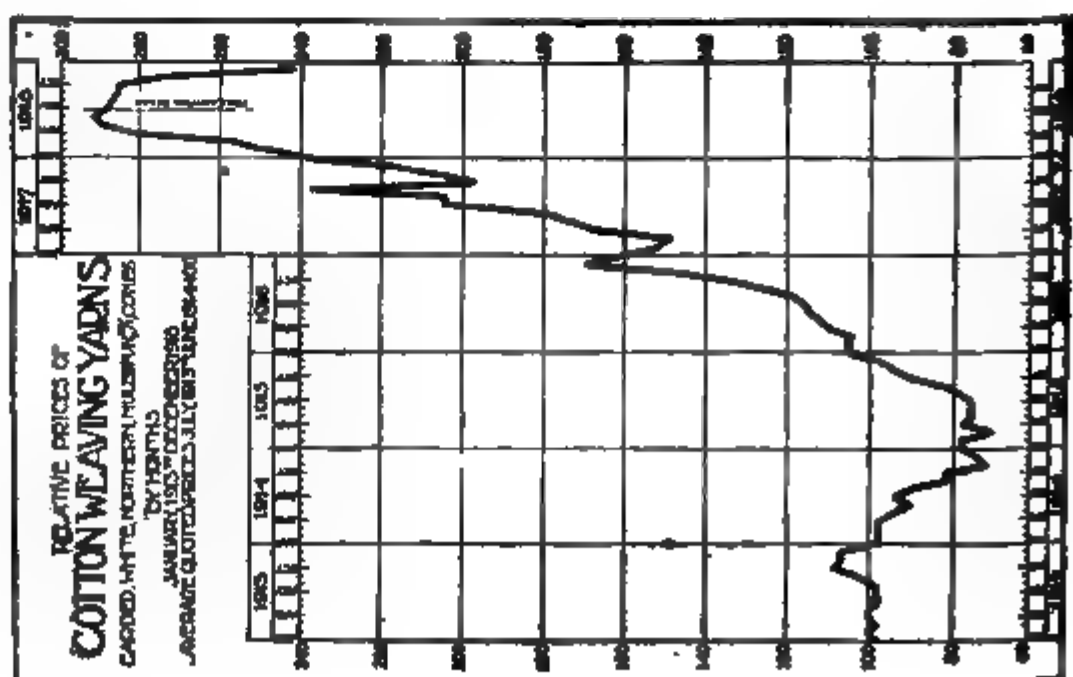
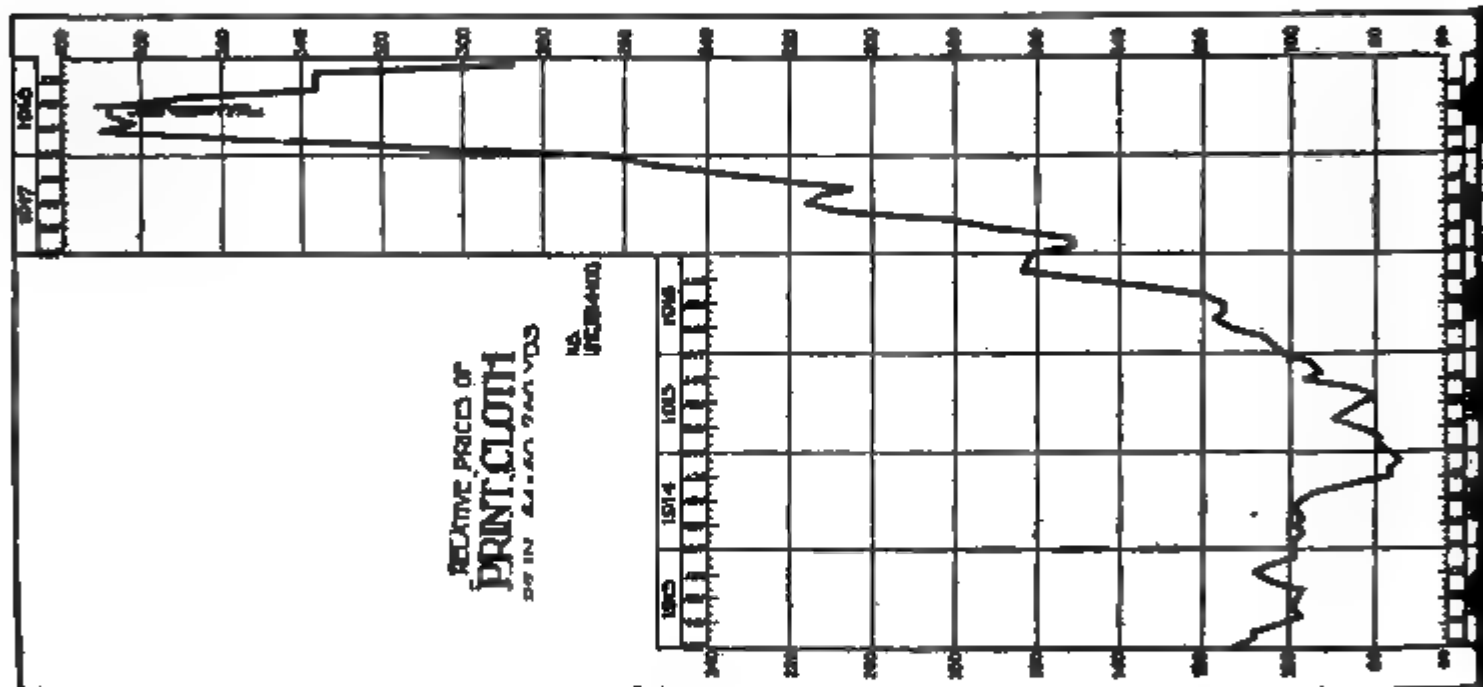
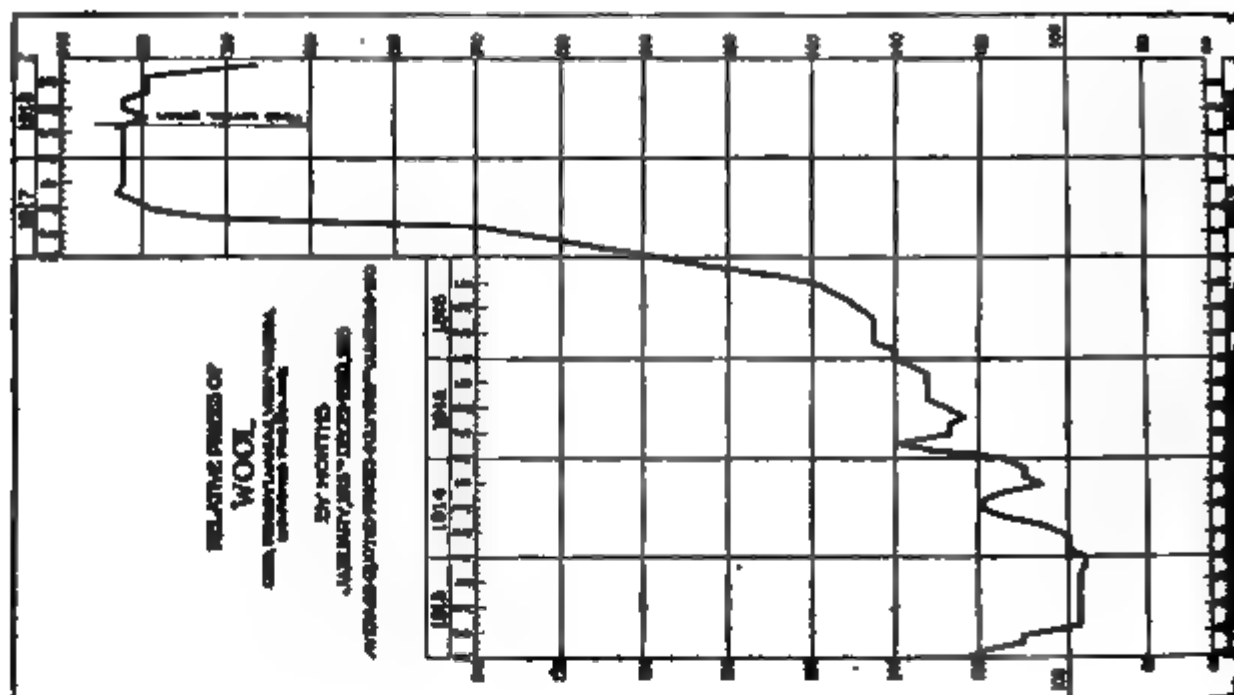


Relative prices.—Hides, packers' heavy native steers.—By months, January, 1913, to December, 1913. (Average quoted prices, July, 1913, to June, 1914=100.)



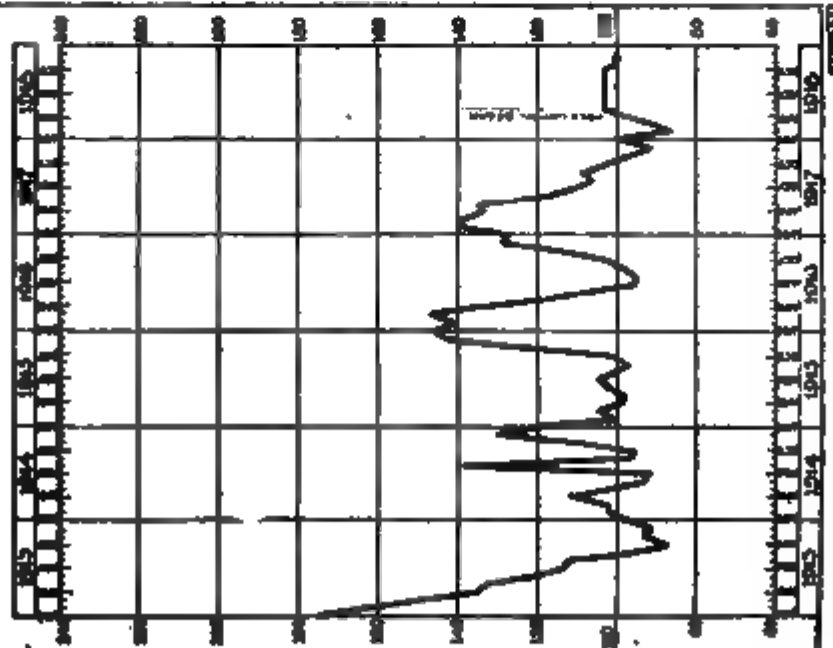
Relative prices.—Sugar, raw, 96° centrifugal, net cash.—By months, January, 1913, to December, 1913. (Average quoted prices, July, 1913, to June, 1914=100.)

Relative prices.—Wheat, No. 1, Northern spring, cash.—By months, January, 1913, to December, 1913. (Average quoted prices, July, 1913, to June, 1914=100.)

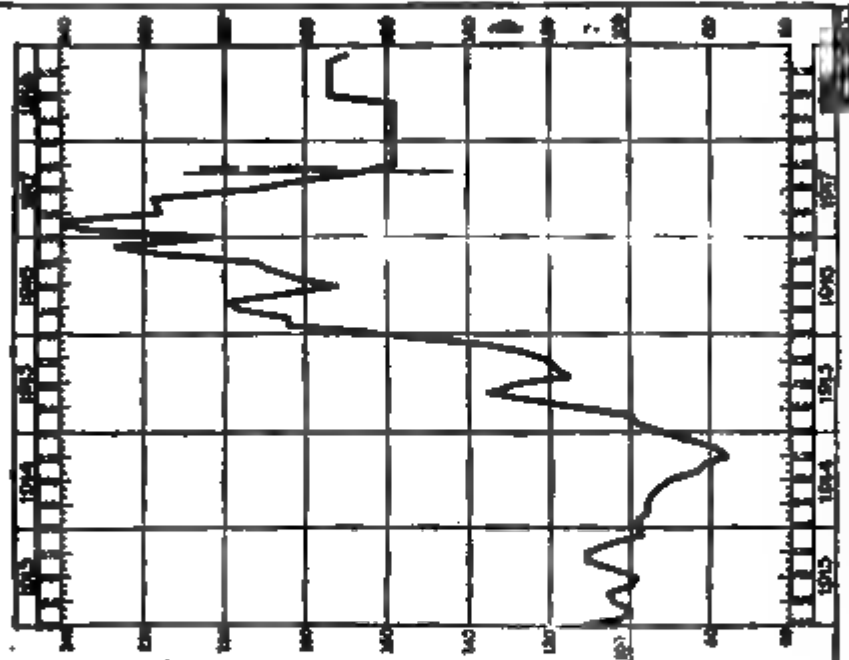


RELATIVE PRICES OF
RUBBER

(Change
Noted)



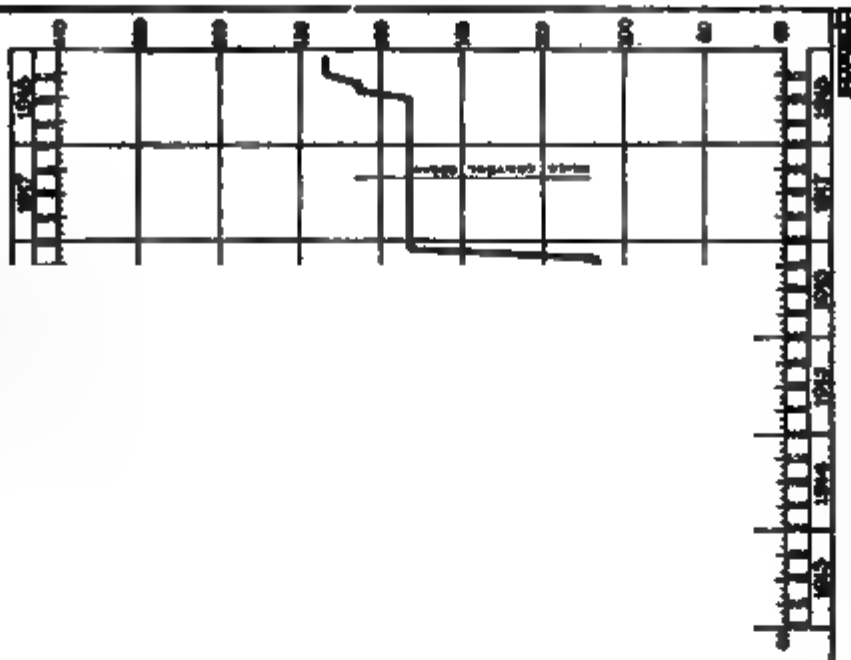
Relative prices.—Rubber, crude plantation Hevea, first latex crepe.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

RELATIVE PRICES OF
COPPER
ELECTROLYTIC

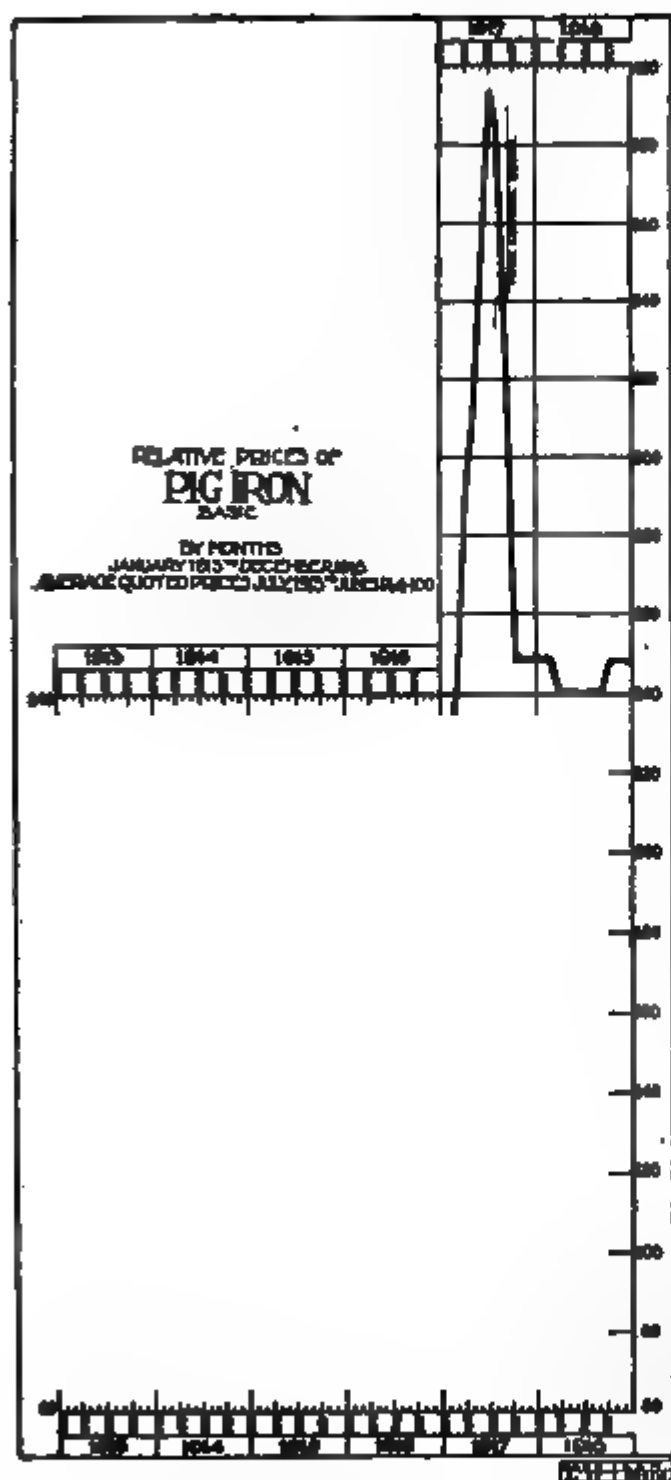
Relative prices.—Copper, electrolytic.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

RELATIVE PRICES OF
IRON ORE

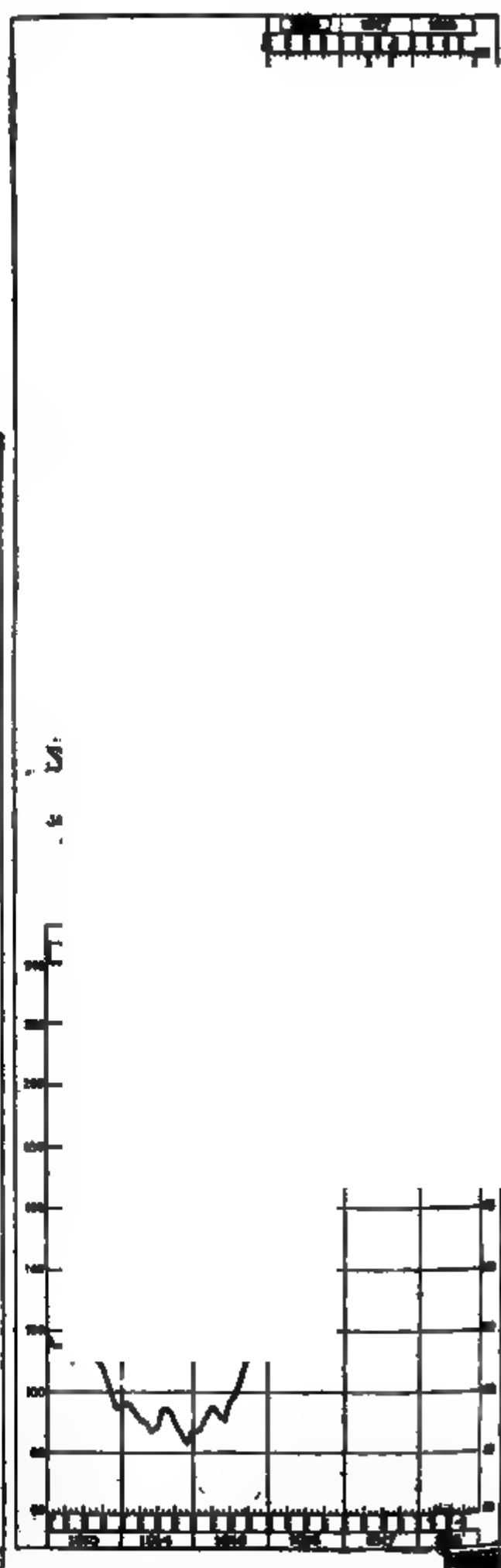
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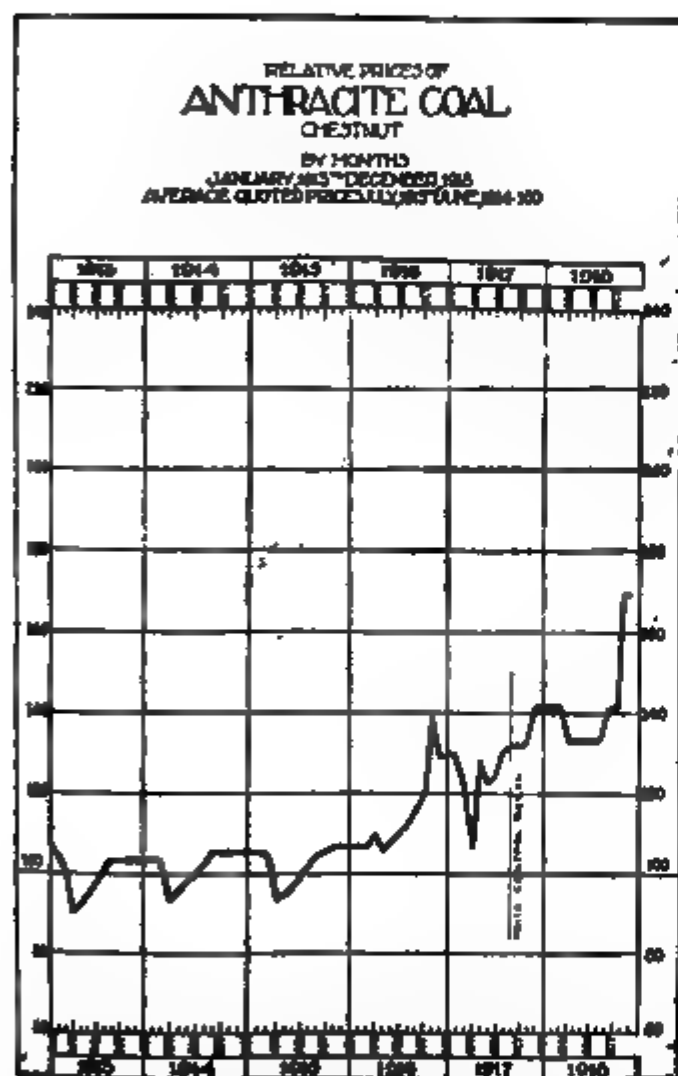
Relative prices.—Iron ore, Mesabi, non-bessemer, 514 per cent.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



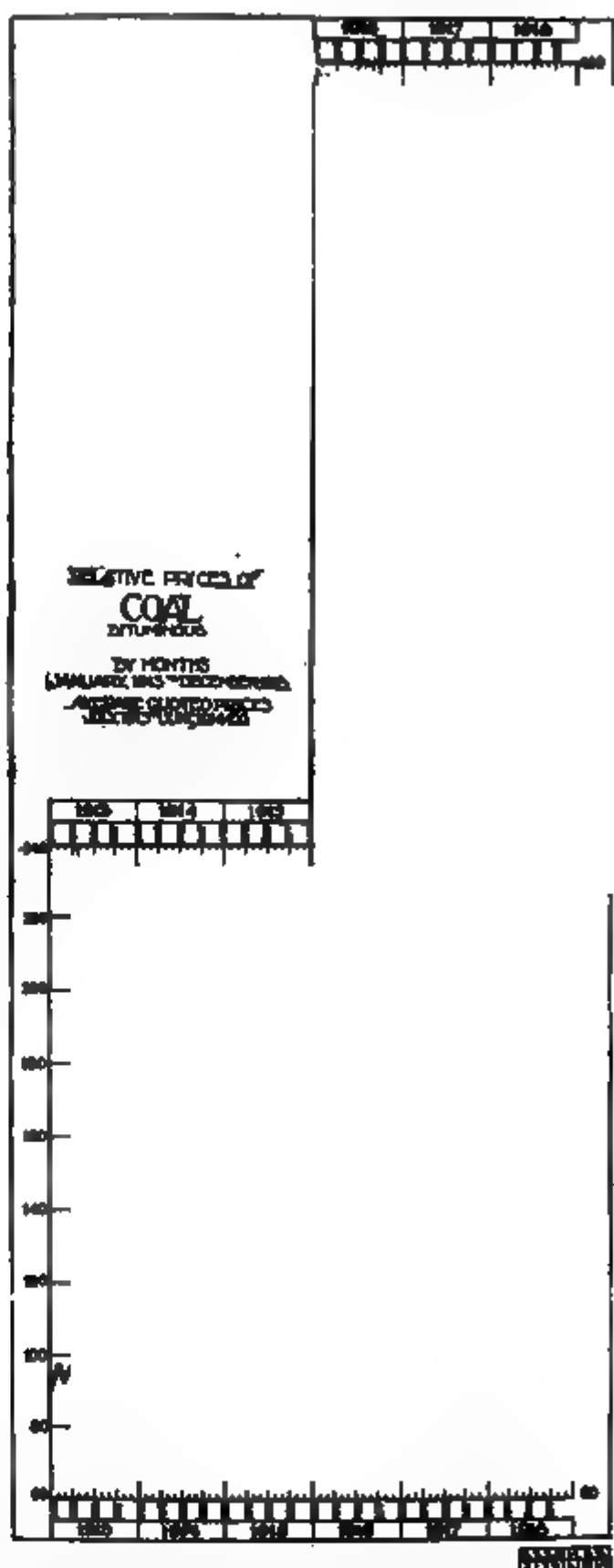
Relative prices.—Pig iron, basic.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914 = 100.)



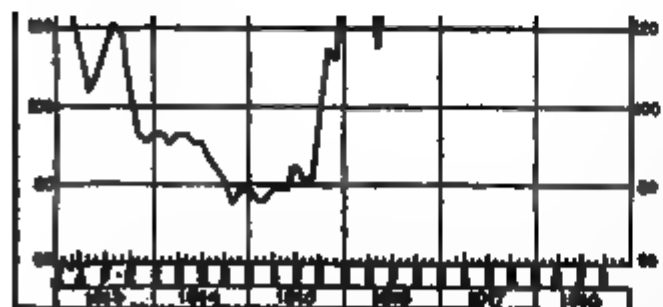
Relative prices.—Steel plates, tank.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914 = 100.)



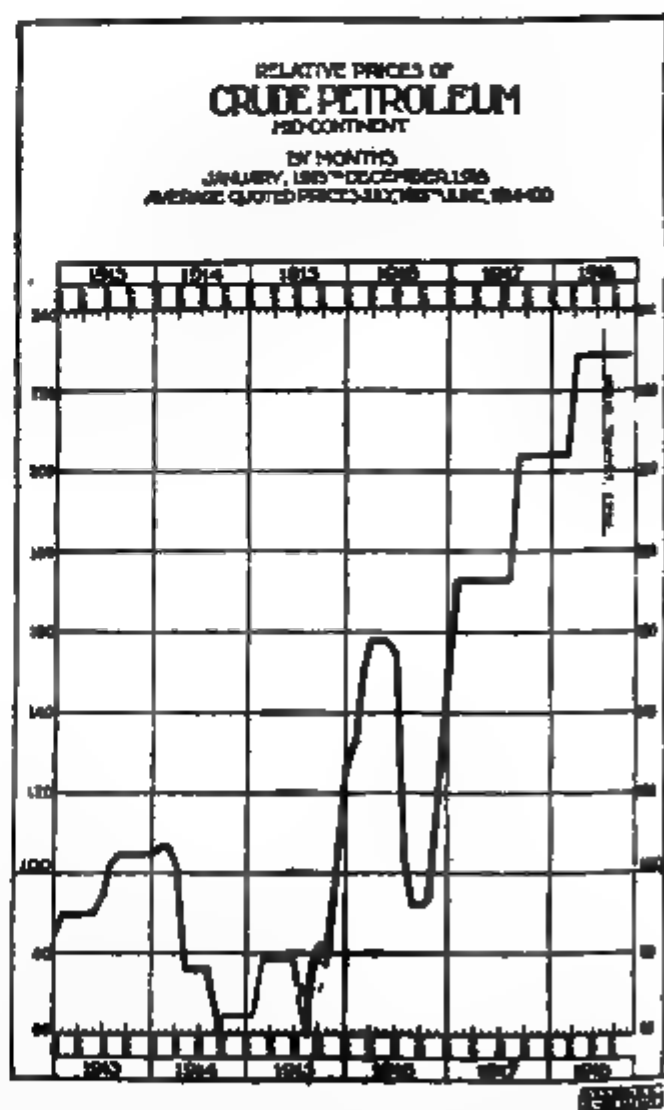
Relative prices.—Anthracite coal, chestnut.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



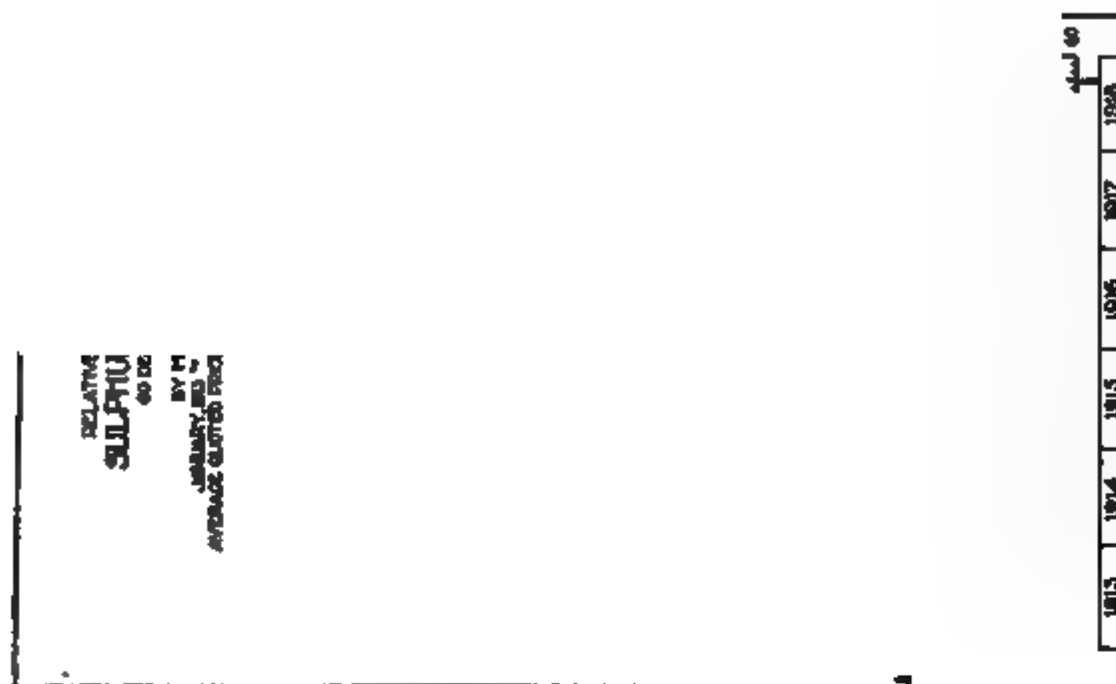
Relative prices.—Coal, bituminous.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



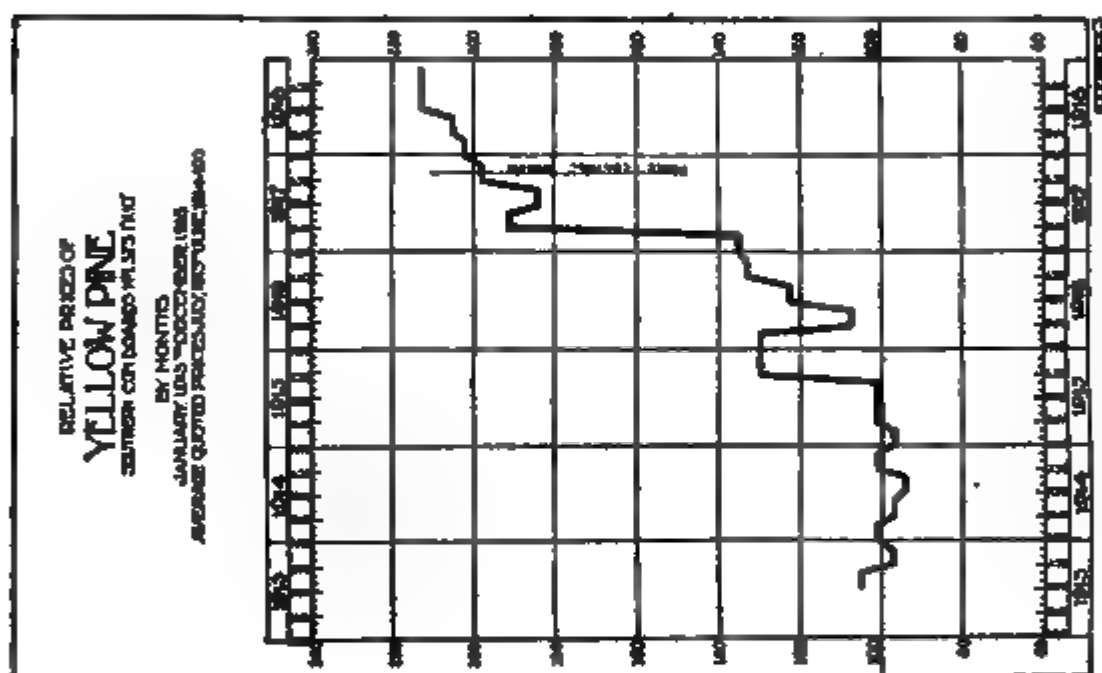
Relative prices.—Coke, Connellsville.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



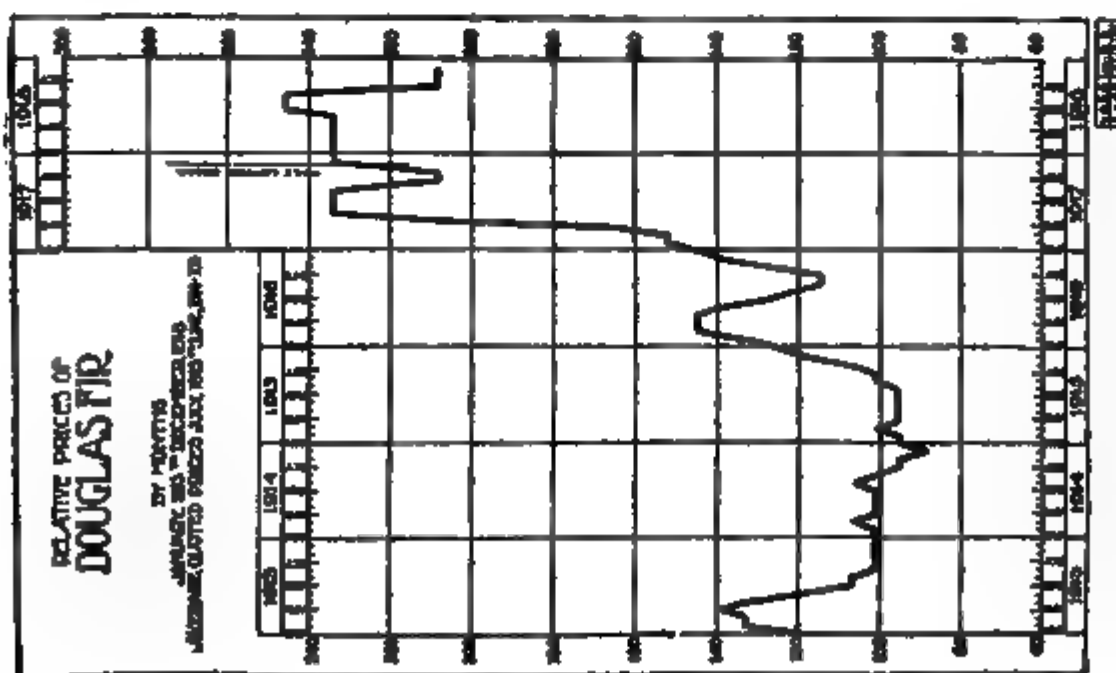
Relative prices.—Crude petroleum, mid-continent.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



Relative prices.—Sulphuric acid, 60 degrees.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



Relative prices.—Yellow pine, Southern, common boards, No. 1, 8-2-8 1'x10'.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



Relative prices.—Douglas fir.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)

A SUMMARY OF ACTUAL AND RELATIVE PRICES BELOW WHICH BASIC COMMODITIES WERE FIXED.

Commodity.	Prewar price (July, 1913 to June, 1914).		Market price when control began.		Government initial fixed price.	
	Actual.	Relative.	Actual.	Relative.	Actual.	Relative.
FOODS.						
1. Bacon.....	\$0.1298	100	.....	.....	.....	.....
2. Beef.....	.1297	100	.....	.....	.....	.....
3. Cattle.....	9.1022	100	.....	.....	.....	.....
4. Corn.....	.6859	100	.....	.....	.....	.....
5. Cottonseed oil.....	.0607	100	\$0.1750	288	\$0.1750	288
6. Hogs, live.....	8.3094	100	16.9500	204	15.5000	187
7. Oats.....	.4005	100	.....	.....	.....	.....
8. Rice.....	.0528	100	.0938	178	.0913	174
9. Sugar, raw.....	.0340	100	.0690	203	.06005	176
10. Wheat.....	.8901	100	2.7875	313	2.1700	244
CLOTHING.						
11. Calfskins.....	.1984	100	.4040	204	.3400	171
12. Cattle hides.....	.1881	100	.3110	167	.3300	177
13. Cotton duck.....	.1550	100	.3425	221	.3350	216
14. Cotton linters.....	.0205	100	.0487	238	.0467	228
15. Cotton weaving yarn.....	.2438	100	.7120	292	.6650	273
16. Leather, harness.....	.4121	100	.6800	165	.6800	165
17. Leather, belting.....	.5042	100	.9700	192	.9600	190
18. Print cloths.....	.0335	100	.1300	388	.1125	336
19. Rags, woolen.....	.1250	100	.5650	452	.6200	496
20. Sheeting.....	.0606	100	.2300	380	.1750	289
21. Wool, domestic.....	.2317	100	.7500	324	.7500	324
22. Wool, Buenos Aires.....	.3083	100	.7400	240	.7400	240
RUBBER, PAPER, AND FIBER.						
23. Manila fiber.....	.0780	100	.2731	350	.2600	333
24. Paper, newsprint.....	1.9046	100	3.2450	170	3.1000	163
25. Rubber, crude.....	.6123	100	.6000	98	3.5000	184
					.6300	103
METALS.						
26. Copper, electrolytic.....	.1492	100	.2545	171	.2350	158
27. Iron, ore.....	3.3083	100	5.0500	153	5.0500	153
28. Lead, pig.....	.0418	100	.0625	150	.0805	193
29. Pig iron, basic.....	13.3183	100	42.7500	321	33.0000	248
30. Quicksilver.....	38.8558	100	121.7500	313	105.0000	270
31. Steel bars.....	1.2600	100	3.8800	308	2.9000	230
32. Steel billets.....	21.7917	100	55.2500	254	47.5000	218
33. Steel plates.....	1.2600	100	7.0500	560	3.2500	258
34. Steel structural shapes.....	1.4600	100	5.1900	355	3.0000	205
35. Tinplate.....	3.4375	100	12.0000	349	7.7500	225
36. Zinc sheets.....	.0735	100	.1800	245	.1500	204
FUELS.						
37. Coal, anthracite.....	3.7800	100	4.9000	130	4.8000	127
38. Coal, bituminous.....	1.0900	100	2.5400	233	2.0000	183
39. Coke, Connellsville.....	2.0625	100	11.7500	570	6.0000	291
40. Petroleum, crude.....	.9725	100	2.2500	231	.....	.....
BUILDING MATERIALS.						
41. Cement, Portland.....	1.5800	100	2.5600	162	1.8500	117
42. Douglas fir.....	7.9167	100	18.5000	234	18.5000	234
43. Pennsylvania hemlock.....	24.8300	100	32.6200	131	32.0000	129
44. Southern or yellow pine.....	13.8750	100	27.5000	198	24.0000	173
45. New England spruce.....	24.2600	100	46.3700	191	45.0000	185
CHEMICALS.						
46. Alcohol, wood.....	.4558	100	1.3500	296	.7900	173
47. Arsenic.....	.0310	100	.1600	516	.0900	290
48. Caustic soda.....	.0181	100	.0490	271	.0350	193
49. Nitrate of soda.....	2.3183	100	4.4938	194	4.2250	182
50. Sulphuric acid.....	.0085	100	.0125	147	.0090	106

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Food group.									
	Bacon, rough sides, smoked, loose, Chicago (per lb.).	Beef, good, native steers, fresh carcass, Chicago (per lb.).	Cattle, steers, choice to prime heavy beefes, Chicago (per cwt.).	Corn, cash, No. 3, yellow, Chicago (per bu.).	Cotton- seed oil, crude, in barrels, f. o. b. mill (per lb.).	Hogs, live, (bulk of sales), Chicago (per cwt.).	Oats, No. 3, white, cash, Chicago (per bu.).	Rice, Hon- duras head, domes- tic, clean, New Orleans (per lb.).	Sugar, raw, 96° cen- trifugal, New York (per lb.).	Wheat, No. 1 North- ern spring, Minne- apolis (per bu.).
Prewar base price..	\$0. 1298	\$0. 1297	\$9. 1022	\$0. 6859	\$0. 0607	\$8. 3094	\$0. 4085	\$0. 0526	\$6. 0340	\$0. 3901
Made equal to..	100	100	100	100	100	100	100	100	100	100
Market price when control began.....					. 1750	16. 9500		. 0938	. 0690	2. 7875
Found equal to					288	204		178	203	313
Government price..					. 1750	15. 5000		. 0913	. 06005	2. 1700
Found equal to..					288	187		174	176	244
1913—Months—										
January.....	83	111	99	70	83	90	83	90	104	97
February..	86	99	98	71	86	98	84	90	103	98
March.....	88	99	98	74	87	110	82	91	104	95
April.....	92	99	98	81	95	106	87	93	100	99
May.....	96	99	95	83	97	102	95	92	98	102
June.....	99	99	96	89	101	103	102	96	98	103
July.....	105	97	99	90	119	109	98	102	104	101
August.....	101	96	98	108	110	101	105	105	110	99
September..	98	99	100	110	101	101	106	97	109	97
October.....	97	100	100	102	95	99	99	103	103	94
November..	97	100	98	106	99	94	99	100	106	95
December..	97	100	98	100	92	93	101	95	99	96
Quarters—										
First.....	85	103	98	82	85	99	83	91	104	97
Second.....	96	99	96	84	97	104	94	94	99	101
Third.....	101	98	99	104	107	104	104	102	108	99
Fourth.....	97	100	99	102	96	95	100	99	103	95
Year.....	95	100	98	90	95	101	95	96	103	98
1914—Months—										
January.....	98	100	101	91	96	98	97	95	98	96
February..	99	100	101	90	98	103	93	99	101	104
March.....	97	100	102	95	101	103	98	100	88	104
April.....	95	101	102	99	104	102	98	100	88	102
May.....	93	102	100	102	102	99	100	101	96	105
June.....	98	102	101	104	103	97	100	102	98	103
July.....	105	104	103	104	102	106	93	102	96	101
August.....	111	109	110	118	89	107	105	105	168	120
September..	110	111	116	115	79	103	123	95	171	123
October.....	103	111	115	107	67	94	117	90	131	124
November..	97	111	112	100	75	92	121	83	115	130
December..	92	110	107	94	80	87	122	94	116	134
Quarters—										
First.....	98	100	101	92	98	102	98	98	96	103
Second.....	96	102	101	102	103	100	99	101	94	103
Third.....	109	108	111	114	90	106	107	101	145	116
Fourth.....	97	111	111	101	74	91	120	88	121	129
Year.....	100	105	106	102	92	100	106	97	114	113
1915—Months—										
January.....	91	100	101	104	91	82	134	93	119	132
February..	91	94	94	108	98	80	144	94	138	170
March.....	86	91	95	105	91	81	144	94	142	165
April.....	86	91	92	110	91	87	143	94	141	173
May.....	88	94	95	111	89	89	133	94	142	177
June.....	90	97	102	109	86	89	122	94	144	144
July.....	86	101	109	114	85	85	134	92	143	156
August.....	80	102	108	119	86	83	112	86	140	154
September..	75	104	107	112	88	88	87	80	126	110
October.....	85	106	106	93	109	93	91	83	121	114
November..	92	106	109	93	113	80	92	90	140	114
December..	94	106	106	97	120	76	105	87	145	127
Quarters—										
First.....	89	95	97	106	93	81	140	94	133	162
Second.....	88	94	96	110	89	88	133	94	143	165
Third.....	80	103	108	114	87	86	113	86	136	140
Fourth.....	90	106	107	94	114	83	96	87	135	113
Year.....	87	99	102	107	98	85	120	90	137	147

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Food group.									
	Bacon, rough sides, smoked, loose, Chicago (per lb.).	Beef, good, native steers, fresh carcass, Chicago (per lb.).	Cattle, steers, choice to prime heavy beefes, Chicago (per cwt.).	Corn, cash, No. 3, yellow, Chicago (per bu.).	Cotton- seed oil, crude, in barrels f. o. b. mill (per lb.).	Hogs, live, (bulk of sales), Chicago (per cwt.).	Oats, No. 3, white, cash, Chicago (per bu.).	Rice, Hon- duras head, domes- tic, clean New Orleans (per lb.).	Sugar, raw, 96° cen- trifugal, New York (per lb.).	Wheat, No. 1 North- ern spring, Minne- apolis (per bu.).
Prewar base price..	\$0. 1298	\$0. 1297	\$9. 1022	\$0. 6859	\$0. 0607	\$8. 3094	\$0. 4005	\$0. 0526	\$0. 0340	\$0. 8901
Made equal to..	100	100	100	100	100	100	100	100	100	100
Market price when control began.....					. 1750	16. 9500		. 0938	. 0690	2. 7875
Found equal to..					288	204		178	203	313
Government price..					. 1750	15. 5000		. 0913	. 06005	2. 1700
Found equal to..					288	187		174	176	244
1916—Months—										
January....	94	106	104	111	130	87	121	88	137	145
February..	98	106	102	108	136	99	116	88	144	144
March.....	104	106	106	106	154	114	104	87	166	128
April.....	105	106	107	111	168	116	110	87	181	137
May.....	110	106	111	109	172	120	109	87	189	136
June.....	111	109	121	106	154	115	98	87	186	125
July.....	118	109	118	117	148	117	101	86	185	131
August.....	120	106	116	125	150	123	112	85	164	167
September..	123	106	119	126	151	128	115	82	163	181
October....	123	106	120	141	175	121	123	85	184	197
November..	125	106	126	143	188	115	139	91	183	217
December..	121	106	127	133	185	113	130	90	156	198
Quarters—										
First.....	99	106	104	107	140	100	114	87	149	139
Second.....	106	107	113	109	165	117	105	87	185	133
Third.....	120	107	118	123	149	123	109	84	171	160
Fourth.....	123	106	125	139	182	117	131	89	174	204
Year.....	113	107	114	123	161	114	115	87	170	158
1917—Months—										
January....	123	106	126	144	181	130	142	90	154	125
February..	131	109	130	146	178	150	141	90	152	208
March.....	147	115	137	164	197	172	154	93	161	223
April.....	164	123	143	218	226	189	175	128	183	268
May.....	179	123	146	240	242	192	175	133	179	335
June.....	176	125	147	252	240	182	169	135	178	303
July.....	183	126	149	301	213	184	197	133	195	290
August.....	193	132	160	301	221	208	161	135	214	313
September..	207	146	179	301	238	219	149	136	205	250
October....	236	146	181	292	266	206	150	147	203	244
November..	¹ 234	¹ 146	¹ 171	¹ 266	282	¹ 204	¹ 163	¹ 147	203	244
December..	232	144	156	244	281	205	190	151	186	244
Quarters—										
First.....	133	110	131	152	187	151	146	91	156	214
Second.....	173	124	145	235	236	188	173	133	180	302
Third.....	193	136	163	301	225	203	167	135	205	285
Fourth.....	234	146	170	265	277	205	170	148	198	244
Year.....	184	129	152	239	231	187	164	127	185	261
1918—Months—										
January....	204	135	151	240	¹ 288	192	207	151	² 177	² 244
February..	206	135	151	243	288	199	221	151	177	244
March.....	208	135	153	228	288	203	230	162	177	244
April.....	199	158	177	228	288	203	222	171	177	244
May.....	191	173	192	216	288	202	192	172	177	244
June.....	180	183	196	221	288	198	191	174	177	244
July.....	200	185	199	234	288	212	194	² 178	178	244
August.....	280	187	204	242	288	226	174	176	² 178	250
September..	206	189	211	226	² 288	233	180	174	205	249
October....	203	189	211	193	288	² 202	173	174	214	249
November..	203	189	214	189	288	² 200	180	174	214	249
December..	216	189	218	212	288	² 205	179	174	214	249
Quarters—										
First.....	204	135	152	236	288	198	220	155	177	244
Second.....	191	172	187	221	288	201	201	172	177	244
Third.....	202	187	205	234	288	224	182	176	186	247
Fourth.....	207	189	214	197	288	202	178	174	214	249
Year.....	201	171	190	222	288	206	195	169	189	246

¹ Government control began during month.² Government revised price during month.

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Clothing group.					
	Calfskins, No. 1 country, 8-15 lbs., Chicago (per lb.).	Cattle hides, packer, heavy, native steers, Chicago (per lb.).	Cotton duck, standard, U. S. Army firsts, 28½ in., 8 os., Commercial (per yd.).	Cotton linters, Grade D, cut 130-175, New York (per lb.).	Cotton yarn, weaving, carded, white, northern mulespun 22/1 cones, Boston (per lb.).	Leather harness, Grade B, Calif. oak, Chicago (per lb.).
Prewar base price.....	\$0. 1984	\$0. 1861	\$0. 1550	\$0. 0205	\$0. 2438	\$0. 4121
Made equal to.....	100	100	100	100	100	100
Market price when control be- gan.....	. 4040	. 3110	. 3425	. 0487	. 7120	. 6800
Found equal to.....	204	167	221	238	292	165
Government price.....	. 3400	. 3300	. 3350	. 0467	. 6650	. 6800
Found equal to.....	171	177	216	228	273	165
1913—Months—						
January.....	91	103	100	122	98	99
February.....	89	97	100	110	100	99
March.....	87	97	100	122	98	99
April.....	89	93	100	110	100	99
May.....	94	89	100	110	100	99
June.....	93	94	100	117	98	99
July.....	96	95	100	117	98	99
August.....	96	100	100	117	98	99
September.....	97	101	100	110	103	98
October.....	102	106	100	112	109	98
November.....	102	106	100	112	107	101
December.....	105	106	100	110	107	101
Quarters—						
First.....	89	99	100	118	99	99
Second.....	92	92	100	112	100	99
Third.....	96	99	100	115	100	99
Fourth.....	103	106	100	111	107	100
Year.....	95	99	100	114	102	99
1914—Months—						
January.....	98	97	100	98	98	101
February.....	98	96	100	85	98	101
March.....	103	97	100	85	98	101
April.....	101	97	100	85	98	101
May.....	101	98	100	85	94	101
June.....	101	99	100	85	90	101
July.....	101	104	100	85	94	101
August.....	103	110	90	85	90	101
September.....	116	113	90	85	82	102
October.....	113	114	90	85	82	103
November.....	112	117	81	49	72	104
December.....	121	121	81	85	74	104
Quarters						
First.....	100	97	100	89	98	101
Second.....	101	98	100	85	94	101
Third.....	107	109	94	75	89	101
Fourth.....	116	117	84	83	76	104
Year.....	106	105	94	76	89	102
1915—Months—						
January.....	113	124	81	68	78	109
February.....	118	126	81	102	78	112
March.....	108	124	81	103	70	110
April.....	89	101	77	127	78	110
May.....	96	111	77	127	76	107
June.....	100	125	77	185	76	107
July.....	102	138	77	202	76	107
August.....	116	147	84	198	79	108
September.....	103	142	84	205	82	112
October.....	113	142	90	327	90	112
November.....	117	141	90	351	94	112
December.....	126	138	90	375	98	112
Quarters—						
First.....	113	125	81	91	75	110
Second.....	95	112	77	150	77	108
Third.....	107	143	82	201	79	108
Fourth.....	119	141	90	351	94	112
Year.....	109	130	83	199	81	110

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Clothing group.					
	Leather belting, butts, medium standard tannages, Philadel- phia (per lb.).	Printcloths, 27 in., 64 by 60, 7.60 yds., Boston (per yd.).	Rags, woolen, new clips, blue worsted, New York (per lb.).	Sheeting, Ware Shoals, L.L., brown, New York (per yd.).	Wool, dom., Ohio, Penn., W. Va., unwashed, fine delaine, Boston (per lb.).	Wool, Buenos Aires 46s, shrinkage 34 per cent, Boston (per lb.).
Prewar base price.....	\$0. 5042	\$0. 0335	\$0. 1250	\$0. 0606	\$0. 2317	\$0. 3083
Made equal to.....	100	100	100	100	100	100
Market price when control began.....	.9700	.1200	.5600	.2300	.7500	.7400
Found equal to.....	192	308	452	380	324	240
Government price.....	.9600	.1125	.6200	.1750	.7500	.7400
Found equal to.....	190	336	496	289	324	240
1913—Months—						
January.....	103	112	92	105	122	123
February.....	103	108	92	103	119	122
March.....	103	108	121	103	110	120
April.....	103	102	108	101	110	118
May.....	101	97	108	99	97	117
June.....	101	99	98	99	97	120
July.....	99	98	84	97	97	122
August.....	99	97	88	97	97	123
September.....	99	104	88	101	97	120
October.....	99	108	100	103	97	117
November.....	101	108	104	103	97	110
December.....	101	99	104	103	96	97
Quarters—						
First.....	103	110	108	104	117	122
Second.....	102	99	108	100	101	118
Third.....	99	99	87	98	97	122
Fourth.....	100	104	102	103	97	108
Year.....	101	103	99	101	103	117
1914—Months—						
January.....	101	99	98	103	96	84
February.....	99	99	104	101	100	78
March.....	101	97	108	99	100	81
April.....	101	98	113	97	101	88
May.....	99	97	104	97	106	89
June.....	99	99	104	97	114	91
July.....	101	98	96	97	119	94
August.....	101	95	92	95	119	95
September.....	106	86	120	91	114	96
October.....	109	76	121	83	106	97
November.....	109	76	120	74	110	99
December.....	109	73	120	74	110	101
Quarters—						
First.....	100	98	108	101	99	81
Second.....	100	98	107	97	107	89
Third.....	102	98	108	94	117	95
Fourth.....	100	75	121	77	109	99
Year.....	103	91	109	92	108	91
1915—Months—						
January.....	111	76	126	72	114	110
February.....	105	79	156	74	132	114
March.....	111	79	192	76	140	117
April.....	111	84	172	81	127	120
May.....	111	90	172	78	127	122
June.....	111	87	172	78	123	123
July.....	121	84	168	87	127	127
August.....	125	80	172	91	132	128
September.....	125	85	196	99	132	130
October.....	129	97	176	95	132	131
November.....	139	98	204	95	132	133
December.....	149	95	216	95	136	136
Quarters—						
First.....	109	78	161	74	129	114
Second.....	111	87	172	79	126	122
Third.....	127	83	179	92	130	128
Fourth.....	142	95	199	95	133	134
Year.....	122	86	178	85	129	124

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Clothing group.					
	Calfskins, No. 1 country, 8-15 lbs., Chicago (per lb.).	Cattle hides, packer, heavy, native steers, Chicago (per lb.).	Cotton duck, standard, U. S. Army firsts, 28½ in., 8 oz., Commercial (per yd.).	Cotton linters, Grade D, cut 130-175, New York (per lb.).	Cotton yarn, weaving, carded, white, northern mulespun 22/1 cones, Boston (per lb.).	Leather harness, Grade B, Calif. oak, Chicago (per lb.).
Prewar base price.....	\$0. 1984	\$0. 1861	\$0. 1550	\$0. 0205	\$0. 2438	\$0. 4121
Made equal to.....	100	100	100	100	100	100
Market price when control be- gan.....	. 4040	. 3110	. 3425	. 0487	. 7120	. 6800
Found equal to.....	204	167	221	238	292	165
Government price.....	. 3400	. 3300	. 3350	. 0467	. 6650	. 6800
Found equal to.....	171	177	216	228	273	165
1916—Months—						
January.....	129	124	94	341	105	112
February.....	125	128	94	366	105	112
March.....	139	122	94	341	104	112
April.....	141	120	94	341	110	114
May.....	164	133	103	341	112	114
June.....	164	144	103	390	115	119
July.....	171	145	116	390	116	119
August.....	164	141	116	390	118	119
September.....	166	140	123	307	125	121
October.....	181	143	129	341	135	121
November.....	227	169	137	378	149	131
December.....	271	180	129	378	170	155
Quarters—						
First.....	131	125	94	350	104	112
Second.....	156	122	100	358	112	116
Third.....	167	142	118	362	120	120
Fourth.....	226	164	132	366	151	136
Year.....	170	141	111	359	122	121
1917—Months—						
January.....	239	180	129	378	160	163
February.....	208	171	129	378	152	163
March.....	202	164	137	378	148	163
April.....	214	164	161	378	168	163
May.....	232	169	161	322	174	163
June.....	214	177	177	322	180	163
July.....	227	177	194	322	205	163
August.....	202	172	194	256	205	163
September.....	174	177	194	256	238	163
October.....	176	181	194	256	197	163
November.....	202	189	221	238	205	163
December.....	166	188	221	238	217	163
Quarters—						
First.....	216	172	132	378	153	163
Second.....	220	170	167	340	174	163
Third.....	201	176	194	278	216	163
Fourth.....	181	186	212	244	206	163
Year.....	205	176	176	310	187	163
1918—Months—						
January.....	161	176	221	238	238	165
February.....	168	157	221	238	249	165
March.....	156	141	221	238	257	165
April.....	181	146	221	238	281	165
May.....	¹ 204	¹ 167	221	¹ 228	269	165
June.....	197	177	221	228	292	¹ 165
July.....	197	174	¹ 216	228	¹ 288	165
August.....	197	² 161	216	228	287	165
September.....	197	161	216	228	285	165
October.....	197	161	216	228	285	165
November.....	197	² 156	221	228	273	165
December.....	197	156	221	228	242	165
Quarters—						
First.....	160	160	221	238	248	165
Second.....	194	164	221	231	267	165
Third.....	197	166	216	228	267	165
Fourth.....	197	158	219	228	267	165
Year.....		161	219	231	272	165

¹ Government control began during month.² Government revised price during month.

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Clothing group.					
	Leather belting, butts, medium standard tannages, Philadel- phia (per lb.).	Printcloths, 27 in., 64 by 60, 7.60 yds., Boston (per yd.).	Rags, woolen, new clips, blue worsted, New York (per lb.).	Sheeting, Ware Shoals, L.L., brown, New York (per yd.).	Wool, dom., Ohio, Penn., W. Va., unwashed, fine delaine, Boston (per lb.).	Wool, Buenos Aires 46s, shrinkage 34 per cent, Boston (per lb.).
Prewar base price.....	\$0. 5042	\$0. 0335	\$0. 1250	\$0. 0606	\$0. 2317	\$0. 3083
Made equal to.....	100	100	100	100	100	100
Market price when control began.....	. 9700	. 1300	. 5650	. 2300	. 7500	. 7400
Found equal to.....	192	388	452	380	324	240
Government price.....	. 9600	. 1125	. 6200	. 1750	. 7500	. 7400
Found equal to.....	190	336	496	289	324	240
1916—Months—						
January.....	149	101	248	97	140	136
February.....	149	104	276	99	140	139
March.....	155	106	248	99	145	143
April.....	149	113	236	103	145	146
May.....	157	117	224	109	145	149
June.....	159	115	224	109	145	151
July.....	159	115	224	109	149	152
August.....	159	120	220	120	151	156
September.....	157	134	212	128	155	162
October.....	157	149	188	140	158	165
November.....	169	164	256	153	170	169
December.....	169	162	252	163	186	175
Quarters—						
First.....	151	104	257	98	142	139
Second.....	155	115	228	107	145	149
Third.....	158	123	219	119	152	157
Fourth.....	165	158	232	152	171	170
Year.....	157	125	234	119	152	154
1917—Months—						
January.....	175	161	276	163	196	175
February.....	175	152	252	163	211	178
March.....	182	152	251	169	220	185
April.....	182	159	252	173	231	190
May.....	188	180	250	182	240	211
June.....	188	207	258	194	304	227
July.....	188	216	258	198	317	343
August.....	188	213	262	202	322	343
September.....	188	205	256	202	326	242
October.....	188	222	256	223	324	240
November.....	188	239	296	231	324	237
December.....	188	254	296	243	324	240
Quarters—						
First.....	177	155	261	165	209	179
Second.....	186	187	253	183	258	211
Third.....	188	211	259	201	322	243
Fourth.....	188	239	283	232	324	239
Year.....	185	198	264	195	278	217
1918—Months—						
January.....	188	265	340	272	324	240
February.....	190	308	340	289	324	240
March.....	188	355	332	309	324	240
April.....	188	390	332	371	324	240
May.....	186	382	344	380	324	240
June.....	188	388	360	380	319	240
July.....	192	¹ 388	452	¹ 380	324	240
August.....	¹ 190	371	¹ 488	289	324	240
September.....	190	336	496	297	319	240
October.....	190	336	496	297	319	240
November.....	190	336	496	297	319	240
December.....	190	287	488	297	293	257
Quarters—						
First.....	189	313	337	290	324	240
Second.....	188	387	345	377	322	240
Third.....	191	362	479	322	322	240
Fourth.....	190	316	493	297	311	246
Year.....	190	344	414	321	320	241

¹ Government control began during month.

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Rubber, paper, fiber group.		
	Manila fiber, fair current shipment, New York (per lb.)	Paper, news print, rolls, car lots United States average (per cwt.)	Rubber, crude, Hevea, first latex, crepe New York (per lb.)
Prewar base price.....	\$0.0780	\$1.9046	\$0.6123
Made equal to.....	100	100	100
Market price when control began.....	.2731	3.2450	.6888
Found equal to.....	350	170	98
Government price.....	.2600	3.1000	.6300
Found equal to.....	333	163	103
		3.5000	184
1913—Months—			
January.....	143	101	175
February.....	143	101	164
March.....	138	101	149
April.....	132	100	135
May.....	122	101	132
June.....	112	100	121
July.....	109	101	114
August.....	115	101	112
September.....	115	100	96
October.....	109	100	87
November.....	97	100	93
December.....	91	99	91
Quarters—			
First.....	141	101	163
Second.....	122	100	129
Third.....	113	100	107
Fourth.....	99	100	90
Year.....	119	100	122
1914—Months—			
January.....	87	100	97
February.....	90	100	103
March.....	98	100	102
April.....	90	100	112
May.....	98	100	101
June.....	95	99	93
July.....	95	100	91
August.....	95	100	139
September.....	102	100	96
October.....	95	100	95
November.....	83	102	109
December.....	90	102	130
Quarters—			
First.....	93	100	101
Second.....	94	100	102
Third.....	97	100	109
Fourth.....	89	101	111
Year.....	93	100	106
1915—Months—			
January.....	90	100	119
February.....	113	99	100
March.....	123	99	105
April.....	131	99	99
May.....	125	99	98
June.....	124	99	102
July.....	119	99	105
August.....	122	99	100
September.....	116	99	97
October.....	115	99	101
November.....	127	99	122
December.....	129	99	143
Quarters—			
First.....	112	100	108
Second.....	127	99	99
Third.....	119	99	101
Fourth.....	123	99	122
Year.....	120	99	108

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Rubber, paper, fiber group.		
	Manila fiber, fair current shipment, New York (per lb.)	Paper, news print, rolls, car lots United States average (per cwt.)	Rubber, crude, Hevea, first latex, crêpe New York (per lb.)
Prewar base price.....	\$0.0789	\$1.9046	\$0.6123
Made equal to.....	100	100	100
Market price when control began.....	.2731	3.2450	.6000
Found equal to.....	350	170	98
		3.1000	
Government price.....	.2600	163	.6300
Found equal to.....	333	3.5000	103
		184	
1916—Months—			
January.....	149	100	146
February.....	175	99	140
March.....	172	100	147
April.....	166	101	136
May.....	168	102	117
June.....	159	105	105
July.....	160	108	95
August.....	156	112	95
September.....	148	115	98
October.....	143	118	102
November.....	139	116	112
December.....	173	128	129
Quarters—			
First.....	166	100	145
Second.....	164	108	119
Third.....	155	111	98
Fourth.....	152	129	114
Year.....	159	108	191
1917—Months—			
January.....	202	159	127
February.....	205	162	140
March.....	208	169	139
April.....	205	168	134
May.....	256	168	135
June.....	308	167	118
July.....	327	167	111
August.....	329	167	106
September.....	321	179	109
October.....	321	167	104
November.....	314	164	98
December.....	349	162	91
Quarters—			
First.....	203	160	135
Second.....	266	168	129
Third.....	325	168	109
Fourth.....	328	164	98
Year.....	284	165	118
1918—Months—			
January.....	366	170	100
February.....	350	169	86
March.....	¹ 333	170	91
April.....	333	¹ 173	98
May.....	333	² 191	¹ 103
June.....	333	191	103
July.....	² 333	² 195	103
August.....	305	193	103
September.....	293	196	103
October.....	290	197	103
November.....	240	197	100
December.....	199	197	100
Quarters—			
First.....	350	170	92
Second.....	333	185	101
Third.....	311	196	103
Fourth.....	240	197	101
Year.....	308	186	99

¹ Government control began during month.² Government revised price during month.

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Metal group.				
	Copper, electro- lytic, New York (per lb.).	Iron ore, Mesabi, non-Bes- semer, 51½ per cent lower lake ports (per gr. ton).	Lead, pig, New York (per lb.).	Pig iron, basic, Ma- honing or Shenango Valley furnace (per gr. ton).	Quick- silver, New York (per flask of 75 lbs.).
Prewar base price.....	\$0.1492	\$3.3083	\$0.0418	\$13.3183	\$38.8558
Made equal to.....	100	100	100	100	100
Market price when control began.....	.2545	5.0500	.0625	42.7500	121.7500
Found equal to.....	171	153	150	321	313
Government price.....	.2350	5.0500	.0805	33.0000	105.0000
Found equal to.....	158	153	193	248	270
1913—Months—					
January.....	112	103	103	123	103
February.....	102	103	104	122	103
March.....	100	103	104	121	102
April.....	104	103	105	119	101
May.....	105	103	104	114	102
June.....	100	103	104	109	103
July.....	98	103	104	108	103
August.....	105	103	111	106	103
September.....	111	103	112	105	101
October.....	111	103	105	104	99
November.....	104	103	103	98	100
December.....	97	103	97	95	103
Quarters—					
First.....	105	103	103	122	103
Second.....	103	103	104	114	102
Third.....	105	103	100	106	102
Fourth.....	104	103	102	99	100
Year.....	104	103	105	110	102
1914—Months—					
January.....	97	103	98	94	100
February.....	98	103	97	99	100
March.....	96	103	95	98	96
April.....	96	103	91	98	98
May.....	95	86	93	98	98
June.....	93	86	93	98	98
July.....	90	86	93	98	95
August.....	83	86	93	98	214
September.....	81	86	92	98	191
October.....	76	86	84	96	138
November.....	79	86	88	94	129
December.....	87	86	91	94	132
Quarters—					
First.....	97	103	97	97	100
Second.....	95	92	93	98	98
Third.....	85	86	92	98	167
Fourth.....	81	86	88	95	133
Year.....	89	92	92	97	124
1915—Months—					
January.....	92	86	89	94	123
February.....	98	86	92	94	153
March.....	100	86	97	94	188
April.....	115	86	101	94	184
May.....	125	86	102	94	199
June.....	132	86	142	95	246
July.....	128	85	135	96	249
August.....	115	85	111	106	236
September.....	119	85	110	111	230
October.....	120	85	110	113	244
November.....	126	85	123	118	278
December.....	136	85	128	131	347
Quarters—					
First.....	97	86	93	94	158
Second.....	124	86	115	94	210
Third.....	121	85	119	104	238
Fourth.....	127	85	121	121	290
Year.....	117	85	112	103	224

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Metal group.				
	Copper, electro- lytic, New York (per lb.).	Iron ore, Mesabi, non-Bes- semer, 51½ per cent lower lake ports (per gr. ton).	Lead, pig, New York (per lb.).	Pig iron, basic, Ma- honing or Shenango Valley furnace (per gr. ton).	Quick- silver, New York (per flask of 75 lbs.).
Prewar base price.....	\$0. 1492	\$3. 3083	\$0. 0418	\$13. 3183	\$38. 8558
Made equal to.....	100	100	100	100	100
Market price when control began.....	.2545	5. 0500	.0625	42. 7500	121. 7500
Found equal to.....	171	153	150	321	313
Government price.....	.2350	5. 0500	.0805	33. 0000	105. 0000
Found equal to.....	158	153	193	248	270
1916—Months—					
January.....	162	107	142	134	596
February.....	184	107	150	133	730
March.....	184	107	171	137	550
April.....	196	107	183	136	361
May.....	200	107	178	135	245
June.....	184	107	166	135	188
July.....	172	107	152	135	205
August.....	183	107	149	135	192
September.....	189	107	163	137	194
October.....	192	107	167	149	204
November.....	216	107	168	188	204
December.....	227	153	180	225	206
Quarters—					
First.....	176	107	154	134	625
Second.....	193	107	176	135	265
Third.....	182	107	155	136	197
Fourth.....	212	122	172	188	205
Year.....	191	111	164	148	323
1917—Months—					
January.....	203	153	183	225	209
February.....	236	153	207	225	311
March.....	240	153	220	242	292
April.....	216	153	222	291	298
May.....	217	153	244	312	273
June.....	218	153	267	366	217
July.....	194	153	256	394	277
August.....	182	153	253	384	296
September.....	171	153	208	321	289
October.....	158	153	161	248	260
November.....	158	153	150	248	264
December.....	158	153	153	248	298
Quarters—					
First.....	226	153	203	230	270
Second.....	217	153	244	322	262
Third.....	182	153	239	368	287
Fourth.....	158	153	154	248	274
Year.....	196	153	210	292	274
1918—Months—					
January.....	158	153	162	248	332
February.....	158	153	167	248	309
March.....	158	153	172	248	312
April.....	158	153	162	240	313
May.....	158	153	163	240	308
June.....	158	153	182	240	313
July.....	174	153	192	240	326
August.....	174	166	193	240	323
September.....	174	166	193	240	329
October.....	174	174	193	248	328
November.....	174	174	193	248	323
December.....	170	174	157	248	305
Quarters—					
First.....	158	153	167	248	319
Second.....	158	153	169	240	311
Third.....	174	162	192	240	326
Fourth.....	173	174	181	248	319
Year.....	165	160	177	244	319

¹ Government control began during month.² Government revised price during month.

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Metal group.					
	Steel bars, base, Pittsburgh (per cwt.).	Steel bil- lets, open- hearth, Pittsburgh (per gr. ton).	Steel plates, tank, Pittsburgh (per cwt.).	Steel, structural shapes, Chicago (per cwt.).	Tin plate, dom. coke, 14 by 20 in. Pittsburgh (per 100-lb. base box).	Zinc sheets, f. o. b. La Salle or Peru, Ill. (per lb.).
Prewar base price.....	\$1.2600	\$21.7917	\$1.2600	\$1.4600	\$3.4375	\$0.0735
Made equal to.....	100	100	100	100	100	100
Market price when control began.....	3.8800	55.2500	7.0500	5.1900	12.0000	.1800
Found equal to.....	308	254	560	355	349	245
Government price.....	2.9000	47.5000	3.2500	3.0000	7.7500	.1500
Found equal to.....	230	218	258	205	225	204
1913—Months—						
January.....	111	131	119	112	105	123
February.....	111	133	115	112	105	117
March.....	111	133	115	112	105	112
April.....	111	126	115	112	105	107
May.....	111	124	115	112	105	104
June.....	111	122	115	112	105	99
July.....	111	122	115	112	105	
August.....	111	118	114	112	105	100
September.....	111	110	111	112	102	100
October.....	110	108	108	100	102	104
November.....	108	94	102	106	102	102
December.....	97	92	95	97	90	99
Quarters—						
First.....	111	122	116	112	105	117
Second.....	111	124	115	112	105	108
Third.....	111	117	113	112	104	104
Fourth.....	108	96	102	105	104	102
Year.....	110	117	112	110	104	107
1914—Months—						
January.....	95	93	95	92	90	101
February.....	97	95	96	95	97	99
March.....	95	95	94	95	97	97
April.....	91	95	91	91	97	95
May.....	90	92	90	88	97	95
June.....	89	89	87	88	97	95
July.....	89	89	88	88	97	95
August.....	94	92	94	94	97	100
September.....	94	95	94	95	107	114
October.....	91	92	90	92	100	110
November.....	88	88	87	87	93	109
December.....	83	87	83	82	95	116
Quarters—						
First.....	96	95	95	94	98	99
Second.....	90	92	90	89	97	95
Third.....	92	92	92	92	101	104
Fourth.....	88	89	87	87	96	112
Year.....	91	92	90	90	98	102
1915—Months—						
January.....	87	87	87	88	92	126
February.....	87	88	87	88	92	168
March.....	91	89	91	91	92	184
April.....	95	89	95	92	96	192
May.....	95	89	93	94	96	260
June.....	95	93	91	95	96	398
July.....	101	103	97	98	92	367
August.....	103	112	100	102	92	256
September.....	107	123	106	106	92	218
October.....	113	124	113	108	92	218
November.....	129	125	120	123	92	272
December.....	139	151	139	134	105	299
Quarters—						
First.....	89	88	89	89	92	150
Second.....	95	91	93	94	96	284
Third.....	104	113	101	102	92	280
Fourth.....	127	123	127	121	96	263
Year.....	104	106	102	101	94	247

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Metal group.					
	Steel bars, base, Pittsburgh (per cwt.).	Steel bil- lets, open- hearth, Pittsburgh (per gr. ton).	Steel plates, tank, Pittsburgh (per cwt.).	Steel, structural shapes, Chicago (per cwt.).	Tin plate, dom. coke, 14 by 20 in. Pittsburgh (per 100-lb. base box).	Zinc sheets, f. o. b. La Salle or Peru, Ill. (per lb.).
Prewar base price.....	\$1.2600	\$21.7917	\$1.2600	\$1.4600	\$3.4375	\$0.0735
Made equal to.....	100	100	100	100	100	100
Market price when control began.....	3.8800	55.2500	7.0500	5.1900	12.0000	.1800
Found equal to.....	308	254	560	355	349	245
Government price.....	2.9000	47.5000	3.2500	3.0000	7.7500	.1500
Found equal to.....	230	218	258	205	225	204
1916—Months—						
January.....	148	163	151	163	107	318
February.....	163	170	171	167	111	333
March.....	187	190	201	177	116	340
April.....	198	206	218	188	131	343
May.....	198	197	225	191	131	327
June.....	198	195	230	191	167	265
July.....	186	204	230	191	171	212
August.....	203	213	233	198	171	204
September.....	206	216	238	201	171	204
October.....	208	220	244	201	171	207
November.....	219	242	264	218	171	248
December.....	233	262	280	236	171	246
Quarters—						
First.....	166	174	174	169	112	331
Second.....	198	209	224	190	143	312
Third.....	203	211	234	197	171	207
Fourth.....	220	241	263	218	171	24
Year.....	197	207	224	194	149	274
1917—Months—						
January.....	238	291	287	236	204	286
February.....	238	298	298	244	204	286
March.....	260	312	344	255	218	286
April.....	269	344	357	260	233	278
May.....	289	404	357	316	233	259
June.....	317	436	563	397	247	259
July.....	357	436	714	424	349	259
August.....	357	385	711	424	349	259
September.....	308	321	560	355	349	259
October.....	230	254	258	205	349	259
November.....	230	218	258	205	225	259
December.....	230	218	258	205	225	259
Quarters—						
First.....	245	301	309	245	208	286
Second.....	292	395	426	324	238	265
Third.....	341	381	662	401	349	259
Fourth.....	230	230	258	205	267	259
Year.....	277	326	413	294	265	267
1918—Months—						
January.....	230	218	258	205	225	259
February.....	230	218	258	205	225	245
March.....	230	218	258	205	225	204
April.....	230	218	258	205	225	201
May.....	230	218	258	205	225	204
June.....	230	218	258	205	225	204
July.....	230	218	258	205	225	204
August.....	230	218	258	205	225	204
September.....	230	218	258	205	225	204
October.....	230	218	258	205	225	204
November.....	230	218	258	205	225	204
December.....	221	207	246	197	218	204
Quarters—						
First.....	230	218	258	205	225	236
Second.....	230	218	258	205	225	204
Third.....	230	218	258	205	225	204
Fourth.....	227	214	251	203	223	204
Year.....	220	217	257	205	225	212

¹Government control began during month.

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.
[Arranged to show relative points below which basic prices were pegged.]

	Fuel Group.				Building Materials Group.				
	Coal, anthracite, chestnut, New York (per long ton.)	Coal, bituminous, Pittsburgh, No. 8 Ohio, Columbus and Detroit (per short ton.)	Coke, Connells-ville furnace, f. o. b. ovens (per short ton.)	Petroleum, crude, Mid-continent (Kans.-Okla.) at wells (per bbl.)	Cement, Portland, domestic, New York (per bbl.)	Douglas fir common, No. 1, 1 by 8 by 10 Washington mills (per M bd. ft.)	Penna. hemlock, No. 1 boards, 1 by 10-16 f. o. b. mill (per M bd. ft.)	Southern or yellow pine, common boards, No. 1, 8-2-8 1 by 10 inches Ark. (per M bd. ft.)	New England spruce, random, 2 by 10 Boston (per M bd. ft.)
Prewar base price	\$3.7800	\$1.0900	\$2.0625	\$0.9725	\$1.5800	\$7.9167	\$24.8300	\$13.8750	\$24.2600
Made equal to	100	100	100	100	100	100	100	100	100
Market price when control began	4.9000	2.5400	11.7500	2.2500	2.5600	18.5000	32.6200	27.5000	46.3700
Found equal to	130	233	570	231	162	234	131	198 ⁰	191
Government price	4.8000	2.0000	6.0000	.....	1.8500	18.5000	32.0000	24.000	45.0000
Found equal to	127	183	291	.....	117	234	129	173	185
1913—Months—									
January	107	113	178	85	100	120	95	.....	19
February	104	98	149	90	100	133	98	.....	104
March	101	93	124	90	100	133	100	.....	104
April	90	97	113	90	100	139	101	.....	106
May	92	96	104	90	100	133	101	.....	106
June	94	94	107	90	100	120	101	.....	104
July	96	92	115	94	100	107	101	105	101
August	100	99	121	102	100	107	101	105	100
September	103	100	119	105	100	101	101	105	100
October	103	106	105	105	100	101	100	97	100
November	103	115	93	105	100	101	100	97	100
December	103	100	91	105	100	101	100	97	100
Quarters—									
First	104	101	150	89	100	128	97	.....	103
Second	92	96	108	90	100	131	101	.....	105
Third	99	97	118	101	100	105	101	105	100
Fourth	103	107	97	105	100	101	100	97	100
Year	99	100	118	97	100	116	100	101	102
1914—Months—									
January	103	98	93	105	100	101	100	101	100
February	103	99	93	107	100	101	101	101	100
March	103	99	91	107	100	107	101	101	100
April	93	99	93	102	100	101	101	97	100
May	95	97	93	76	100	101	102	97	100
June	97	97	91	76	100	101	94	97	90
July	99	95	91	76	100	101	94	94	96
August	112	91	87	76	100	107	94	94	96
September	105	91	84	66	100	101	94	94	97
October	105	96	81	56	100	95	94	101	96
November	105	102	75	56	100	95	94	101	96
December	105	102	79	56	100	88	93	101	96
Quarters—									
First	103	99	93	107	100	103	100	101	100
Second	95	98	93	86	100	101	99	97	100
Third	102	92	87	74	100	103	94	94	96
Fourth	105	100	78	56	100	98	94	101	97
Year	101	97	88	81	100	100	97	96	90
1915—Months—									
January	105	103	79	56	100	95	93	97	96
February	105	105	76	56	100	95	89	97	97
March	104	95	76	41	91	101	89	97	97
April	93	94	79	41	89	95	90	101	96
May	94	88	79	41	89	95	90	101	96
June	96	90	79	41	85	95	90	101	97
July	99	89	85	41	85	95	89	101	96
August	102	94	81	51	85	95	89	101	96
September	104	95	81	76	90	101	89	101	96
October	105	98	97	82	90	101	90	130	96
November	106	97	115	82	90	107	94	130	96
December	106	100	112	102	111	120	98	130	106
Quarters—									
First	104	101	77	51	97	97	91	97	97
Second	94	91	79	41	87	95	90	101	96
Third	102	92	82	57	86	97	89	101	96
Fourth	105	99	108	89	97	100	94	130	100
Year	102	96	87	60	92	99	91	107	96

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.

[Arranged to show relative points below which basic prices were pegged.]

	Fuel Group.				Building Materials Group.				
	Coal anthracite, chestnut, New York (per long ton.)	Coal, bituminous, Pittsburgh, No. 8 Ohio, Columbus and Detroit (per short ton.)	Coke, Connellsville furnace, f. o. b. ovens (per short ton.)	Petroleum, crude, Mid-continent (Kans.-Okla.) at wells (per bbl.)	Cement, Portland, domestic, New York (per bbl.)	Douglas fir common, No. 1, 1 by 8 by 10 Washington mills (per M bd. ft.)	Pennsylvania hemlock, No. 1 boards, 1 by 10-16 f. o. b. mill (per M bd. ft.)	Southern or yellow pine, common boards, No. 1, 8-2-8 1 by 10 inches Ark. (per M bd. ft.)	New England spruce, random, 2 by 10 Boston (per M bd. ft.)
Prewar base price	\$3.7800	\$1.0900	\$2.0625	\$0.9725	\$1.5800	\$7.9167	\$24.8300	\$13.8750	\$24.2600
Made equal to	100	100	100	100	100	100	100	100	100
Market price when control began	4.9000	2.5400	11.7500	2.2500	2.5600	18.5000	32.6200	27.5000	46.3700
Found equal to	130	233	570	231	162	234	131	198	191
Government price	4.8000	2.0000	6.0000	.....	1.8500	18.5000	32.0000	24.0000	45.0000
Found equal to	127	183	291	.....	117	234	129	173	185
1916—Months—									
January	106	96	139	125	106	126	97	130	107
February	106	97	127	133	106	133	97	130	110
March	106	95	145	151	106	145	99	130	110
April	109	102	137	158	106	145	99	117	110
May	105	102	115	158	106	145	99	117	110
June	107	103	127	158	106	139	99	117	108
July	109	103	127	155	106	126	99	123	107
August	122	103	127	106	106	120	100	123	108
September	115	123	133	92	106	114	100	123	113
October	119	228	162	92	106	114	100	133	114
November	140	425	279	93	106	126	103	133	118
December	128	366	279	117	120	139	103	133	130
Quarters—									
First	106	96	137	137	106	135	98	130	109
Second	107	102	126	158	106	143	99	117	109
Third	112	109	129	119	106	120	100	123	109
Fourth	129	340	236	101	110	126	102	133	121
Year	113	162	157	129	107	131	100	126	112
1917—Months—									
January	129	442	352	143	122	145	103	137	130
February	129	438	364	173	128	152	107	137	137
March	122	335	412	173	128	152	107	137	144
April	106	248	352	173	136	164	111	191	146
May	128	374	339	173	136	208	116	191	146
June	122	392	461	173	136	234	130	191	142
July	124	269	504	173	134	234	130	184	138
August	130	269	485	173	134	234	129	184	136
September	¹ 132	184	¹ 570	204	134	234	129	184	151
October	132	184	291	204	134	203	129	198	.....
November	132	224	291	204	134	208	129	¹ 193	166
December	141	224	291	204	¹ 134	¹ 234	128	198	164
Quarters—									
First	126	405	376	165	126	149	106	137	145
Second	119	338	384	173	136	202	119	191	137
Third	128	240	549	184	134	234	129	184	142
Fourth	135	211	291	204	134	217	129	198	165
Year	127	299	400	182	133	201	121	177	146
1918—Months—									
January	141	224	291	204	136	234	132	² 202	163
February	141	224	291	204	136	234	132	202	168
March	141	224	291	204	136	234	131	202	181
April	133	224	291	229	149	234	¹ 131	205	¹ 191
May	133	² 224	291	² 229	² 162	234	129	205	190
June	133	² 215	291	229	164	² 234	129	² 205	188
July	133	219	291	229	165	246	129	213	² 188
August	133	219	291	¹ 229	165	246	² 129	213	188
September	141	219	291	229	184	² 246	137	213	188
October	² 141	219	291	229	203	208	137	213	188
November	169	219	291	229	203	208	137	213	188
December	169	219	291	229	203	208	137	213	188
Quarters—									
First	141	224	291	204	136	234	131	202	172
Second	133	222	291	229	159	234	130	205	190
Third	136	219	291	229	170	246	132	213	188
Fourth	160	219	291	229	203	208	137	213	188
Year	143	221	291	224	167	231	132	208	184

¹ Government control began during month.² Government revised price during month.² Prices fixed August 10, 1918, retroactive to May, 1918.

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.
[Arranged to show relative points below which basic prices were pegged.]

	Chemicals group.				
	Alcohol, wood, refined, 95 per cent, New York (per gal.).	Arsenic, white, New York (per lb.).	Caustic soda, 76 per cent spot, New York (per lb.).	Nitrate of soda, 95 per cent, New York (per cwt.).	Sulphuric acid, 60° Be., New York (per lb.).
Prewar base price.....	\$0.4558	\$0.0310	\$0.0181	\$2.3183	\$0.0085
Made equal to.....	100	100	100	100	100
Market price when control began.....	1.3500	.1600	.0490	4.4938	.0125
Found equal to.....	296	516	271	194	147
Government price.....	.7900	.0900	.0350	4.2250	.0089
Found equal to.....	173	290	193	182	106
1913—Months—					
January.....	110	161	100	112	100
February.....	110	153	100	112	100
March.....	110	187	105	113	100
April.....	108	133	105	113	100
May.....	108	129	103	113	100
June.....	108	113	103	113	100
July.....	108	109	103	110	100
August.....	99	109	103	110	100
September.....	99	103	96	106	100
October.....	101	103	100	104	100
November.....	101	97	100	101	100
December.....	101	101	100	95	100
Quarters—					
First.....	110	151	102	113	100
Second.....	108	125	104	113	100
Third.....	102	107	101	109	100
Fourth.....	101	100	100	100	100
Year.....	106	121	102	109	100
1914—Months—					
January.....	99	93	100	93	100
February.....	99	97	100	96	100
March.....	99	97	100	97	100
April.....	99	97	100	96	100
May.....	99	97	100	97	100
June.....	99	97	100	96	100
July.....	99	97	100	93	100
August.....	99	90	100	90	100
September.....	99	161	100	92	100
October.....	99	161	102	86	100
November.....	99	145	102	82	100
December.....	99	129	102	82	100
Quarters—					
First.....	99	95	100	95	100
Second.....	99	97	100	96	100
Third.....	99	116	100	91	100
Fourth.....	99	145	102	83	100
Year.....	99	114	101	92	100
1915—Months—					
January.....	99	129	102	82	100
February.....	99	129	98	82	100
March.....	99	129	98	82	100
April.....	99	129	112	95	100
May.....	99	129	129	99	100
June.....	99	121	129	99	100
July.....	99	121	192	101	100
August.....	99	113	262	106	100
September.....	99	121	262	101	118
October.....	99	113	290	110	118
November.....	110	113	290	125	118
December.....	110	113	290	125	118
Quarters—					
First.....	99	129	99	82	100
Second.....	99	126	124	98	100
Third.....	99	118	239	103	106
Fourth.....	106	113	290	120	118
Year.....	101	122	188	101	106

RELATIVE PRICES OF FIFTY IMPORTANT COMMODITIES.
[Arranged to show relative points below which basic prices were pegged.]

	Chemicals group.				
	Alcohol, wood, refined, 95 per cent, New York (per gal.).	Arsenic, white, New York (per lb.).	Caustic soda, 76 per cent spot, New York (per lb.).	Nitrate of soda, 95 per cent, New York (per cwt.).	Sulphuric acid, 60° Be., New York (per lb.).
Prewar base price.....	\$0.4538	\$0.0310	\$0.0181	\$2.3183	\$0.0085
Made equal to.....	100	100	100	100	100
Market price when control began.....	1.3500	.1600	.0490	4.4998	.0125
Found equal to.....	296	516	271	194	147
Government price.....	.7900	.0900	.0350	4.2250	.0090
Found equal to.....	173	290	198	182	106
1916—Months—					
January.....	121	145	290	140	235
February.....	123	161	345	147	235
March.....	143	177	352	155	235
April.....	143	210	330	147	235
May.....	143	210	304	147	176
June.....	143	202	276	184	176
July.....	143	198	249	134	118
August.....	143	194	193	134	118
September.....	143	194	193	129	118
October.....	154	185	214	125	118
November.....	165	194	221	125	118
December.....	197	234	262	129	118
Quarters—					
First.....	132	161	329	147	235
Second.....	143	207	306	142	196
Third.....	143	196	212	132	118
Fourth.....	172	204	233	127	118
Year.....	147	192	270	137	167
1917—Months—					
January.....	197	266	242	130	118
February.....	219	339	235	143	118
March.....	219	403	235	158	118
April.....	219	548	242	162	118
May.....	219	581	318	164	118
June.....	219	581	345	172	118
July.....	219	581	387	179	118
August.....	219	548	398	183	147
September.....	219	581	497	198	147
October.....	241	516	470	204	147
November.....	263	548	428	201	147
December.....	¹ 296	532	428	196	176
Quarters—					
First.....	212	336	237	148	118
Second.....	219	570	302	166	118
Third.....	219	570	427	185	138
Fourth.....	267	532	442	200	156
Year.....	229	502	352	175	133
1918—Months—					
January.....	296	290	199	¹ 194	176
February.....	296	516	320	191	206
March.....	296	¹ 516	271	194	206
April.....	199	290	¹ 271	221	206
May.....	199	298	249	222	147
June.....	199	298	262	194	¹ 147
July.....	202	298	214	² 213	106
August.....	201	298	215	² 216	106
September.....	201	298	235	² 208	106
October.....	201	290	249	² 187	² 94
November.....	201	290	235	² 190	94
December.....	201	290	229	² 190	94
Quarters—					
First.....	296	441	264	193	196
Second.....	199	296	261	213	167
Third.....	201	298	222	213	106
Fourth.....	201	290	238	189	94
Year.....	224	331	246	202	141

¹ Government control began during month.

² Government revised price during month.

5. A COMPARISON OF CONTROLLED RAW-MATERIAL PRICES WITH THE PRICES OF THEIR UNCONTROLLED MANUFACTURED PRODUCTS.

The theory underlying practically all of our Government regulation over prices was that stabilization among the prices of manufactures would result from a control simply of the basic raw materials. It was appreciated, of course, that for a rigid exercise of control, regulation must also be extended over the products of manufactures. But, by and large, the Government was content to fix maximum prices for the basic raw materials and leave their finished products to adjust themselves in price as they would.¹

It is of especial interest, in view of this prevailing method of price fixing, to note whether the price control of raw materials actually did operate to stabilize the prices of their primary finished products. Significant bases for that sort of inquiry may be had from a comparison of the raw-material prices for copper, iron and steel, lead, wool, rubber, hides and skins, lumber, and crude petroleum,² which were controlled, with certain of their manufactures which were not. Such a comparison here has been facilitated by turning the actual prices for several controlled raw materials, and their corresponding uncontrolled products, into relative prices by making their respective prewar actual prices (July 1, 1913, to June 30, 1914) equal 100.

The fluctuations of copper wire followed closely those of the highly controlled electrolytic copper. The prices of chains and saws did not rise as high as those of pig iron, but those of chains especially became more stable after control of pig iron began. The fluctuations of lead pipe were almost identical with those of lead. Woolen yarn and suiting prices followed the general rise in wool prices but seem to have been stabilized after control of wool set in. The effect of a control of calfskins upon the prices of shoes can scarcely be made out from a comparison of their respective market prices.

¹ The most notable exceptions to this common practice were wheat and iron and steel, the products of which were controlled in large part as well as the raw materials.

² Crude petroleum was stabilized informally by the industry but not fixed in the same sense that the other raw materials were.

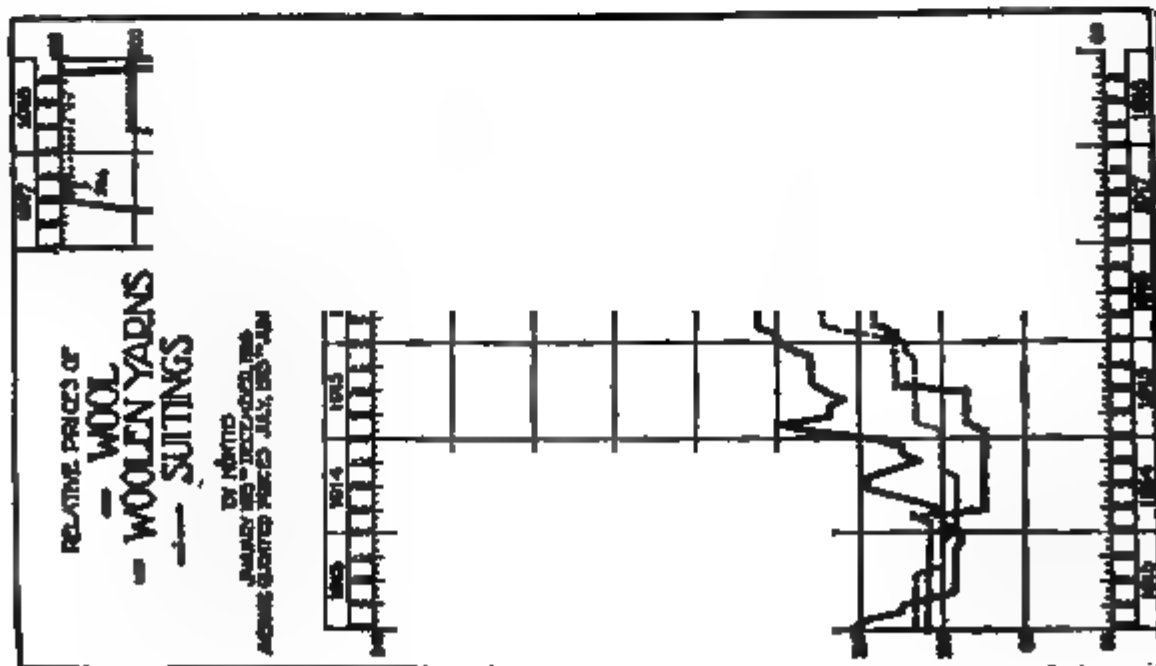


Relative prices.—Pig Iron, Chains and Sawn Lumber.—By months, January, 1913, to December, 1913. (Average quoted prices, July, 1913, to June, 1914—100.)



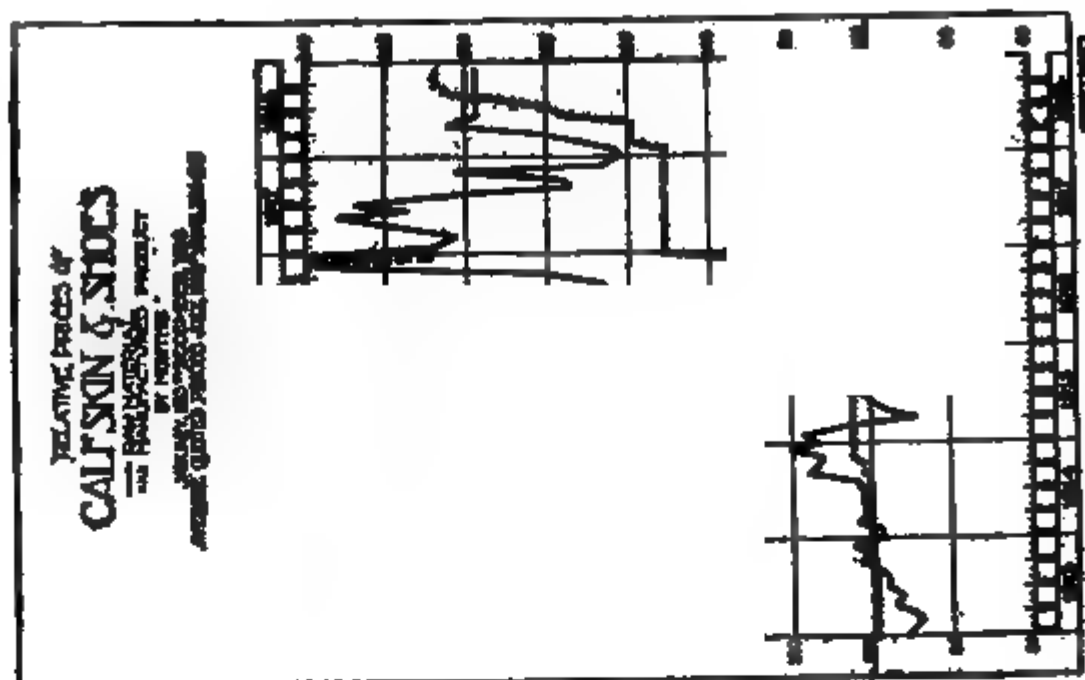
Relative prices.—Lead and Lead Pipe.—By months, January, 1913, to December, 1913. (Average quoted prices, July, 1913, to June, 1914—100.)

Relative prices.—Copper, electrolytic, and copper wire.—By months, January, 1913, to December, 1913. (Average quoted prices, July, 1913, to June, 1914—100.)



Relative
months
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Three.—By
1913. (A ver.
1914 = 100.



Relative prices.—Calfskin and shoes, Raw material, and manufactured product.—By months, January, 1913, to December, 1913. (Average quoted prices, July, 1913, to June, 1914 = 100.)

RELATIVE PRICES OF CONTROLLED RAW MATERIALS AND THEIR UNCONTROLLED MANUFACTURES.

	Copper.		Iron and steel.			Lead.	
	Copper, electrolytic, New York (per lb.).	Copper wire, base prices, New York (per lb.).	Pig iron, Mahoning or She-nango Valley furnace (per gr. ton).	Chains, traces, wagon, western standard, straight, with ring, 6-8-2, New York (per 100 pr.).	Saws, crosscut, Diston No. 2, 6-foot champion tooth, Phila. (per saw).	Lead, pig, New York (per lb.).	Lead pipe, New York (per cwt.).
Prewar base price.....	\$0. 1492	\$0. 1618	\$13. 3183	\$32. 00	\$1. 7820	\$0. 0418	\$4. 8725
Made equal to.....	100	100	100	100	100	100	100
1913—Months—							
January.....	112	114	123	100	100	103	101
February.....	102	108	122	100	100	104	101
March.....	100	99	121	100	100	104	101
April.....	104	99	119	100	100	106	103
May.....	105	103	114	100	100	104	106
June.....	100	108	100	100	100	104	106
July.....	98	99	108	100	100	104	106
August.....	105	99	108	100	100	111	108
September.....	111	103	106	100	100	112	111
October.....	111	110	104	100	100	105	108
November.....	104	110	98	100	100	103	108
December.....	97	99	96	100	100	97	97
Quarters—							
First.....	105	107	122	100	100	103	101
Second.....	103	102	114	100	100	104	106
Third.....	105	100	106	100	100	109	108
Fourth.....	104	106	99	100	100	102	103
Year.....	104	104	110	100	100	106	104
1914—Months—							
January.....	97	99	94	100	100	98	96
February.....	98	99	99	100	100	97	96
March.....	98	97	98	100	100	96	96
April.....	96	96	98	100	100	91	94
May.....	95	96	98	100	100	93	93
June.....	93	94	98	100	100	93	93
July.....	90	90	98	100	100	93	96
August.....	83	90	98	100	100	93	96
September.....	81	83	98	100	100	92	93
October.....	76	80	96	100	100	84	89
November.....	79	77	94	100	100	88	88
December.....	87	86	94	100	100	71	91
Quarters—							
First.....	97	98	97	100	100	97	96
Second.....	95	95	98	100	100	98	98
Third.....	85	88	98	100	100	92	98
Fourth.....	81	81	96	100	100	88	89
Year.....	89	91	97	100	100	92	93
1915—Months—							
January.....	92	90	94	100	100	89	86
February.....	98	97	94	100	100	92	88
March.....	100	97	94	100	100	97	93
April.....	115	103	94	100	100	101	96
May.....	125	124	94	109	100	102	102
June.....	132	124	95	109	100	142	131
July.....	128	130	96	109	100	135	136
August.....	115	124	106	109	100	111	124
September.....	119	117	111	109	100	110	116
October.....	120	117	113	97	100	110	111
November.....	126	117	118	97	100	123	116
December.....	136	130	131	97	100	128	123
Quarters—							
First.....	97	95	94	100	100	93	89
Second.....	124	117	94	106	100	115	110
Third.....	121	124	104	109	100	119	125
Fourth.....	127	121	121	97	100	121	116
Year.....	117	114	103	103	100	112	110

RELATIVE PRICES OF CONTROLLED RAW MATERIALS AND THEIR UNCONTROLLED MANUFACTURES.

	Copper.		Iron and steel.			Lead.	
	Copper, electrolytic, New York (per lb.).	Copper wire, base prices, New York (per lb.).	Pig iron, Mahoning or She-nango Valley furnace (per gr. ton).	Chains, traces, wagon, western standard, straight, with ring, 6-8-2, New York (per 100 pr.).	Saws, crosscut, Diston No. 2, 6-foot champion tooth, Phila. (per saw).	Lead, pig, New York (per lb.).	Lead pipe, New York (per cwt.).
Prewar base price.....	\$0. 1492	\$0. 1618	\$13. 3183	\$32. 00	\$1. 7820	\$0. 0418	\$4. 8725
Made equal to.....	100	100	100	100	100	100	100
1916—Months—							
January.....	162	145	134	100	100	142	133
February.....	184	168	133	106	100	150	143
March.....	184	181	137	119	106	171	162
April.....	196	176	136	119	106	183	181
May.....	200	195	135	134	106	178	174
June.....	184	201	135	134	106	166	163
July.....	172	201	135	134	116	152	156
August.....	183	188	135	188	116	149	146
September.....	189	190	137	188	116	163	151
October.....	192	196	149	188	116	167	156
November.....	216	196	188	188	128	168	158
December.....	227	221	225	188	128	180	166
Quarters—							
First.....	176	165	134	108	102	154	146
Second.....	198	190	135	129	109	176	173
Third.....	182	193	136	170	116	155	151
Fourth.....	212	204	188	188	124	172	160
Year.....	191	188	148	149	113	164	157
1917—Months—							
January.....	203	227	225	188	128	183	176
February.....	236	227	225	188	141	207	191
March.....	240	227	242	188	141	220	206
April.....	216	227	291	188	141	222	211
May.....	217	215	312	188	155	244	230
June.....	218	202	366	188	155	267	257
July.....	194	208	394	188	155	256	257
August.....	182	196	384	188	172	253	246
September.....	171	184	321	238	172	208	226
October.....	158	184	248	238	172	161	181
November.....	158	178	248	238	172	150	156
December.....	158	171	248	238	172	153	156
Quarters—							
First.....	226	227	230	188	137	208	191
Second.....	217	215	322	188	150	244	232
Third.....	182	196	368	204	166	239	243
Fourth.....	158	178	248	238	172	154	164
Year.....	196	204	292	204	156	210	208
1918—Months—							
January.....	158	167	248	238	172	162	161
February.....	158	167	248	238	172	167	171
March.....	158	167	248	238	172	172	176
April.....	158	164	240	238	172	162	176
May.....	158	164	240	238	172	163	176
June.....	158	162	240	238	202	182	183
July.....	174	175	240	238	202	192	191
August.....	174	181	240	238	202	193	191
September.....	174	181	240	238	202	193	191
October.....	174	178	248	238	202	193	191
November.....	174	178	248	238	202	193	191
December.....	170	178	248	238	202	157	191
Quarters—							
First.....	158	167	248	238	172	167	169
Second.....	158	163	240	238	182	169	173
Third.....	174	179	240	238	202	192	191
Fourth.....	173	178	248	238	202	181	191
Year.....	165	172	244	238	189	177	182

¹ Government control of price began during month.

RELATIVE PRICES OF CONTROLLED RAW MATERIALS AND THEIR UNCONTROLLED MANUFACTURES.

	Wool.			Rubber.		Hides and skins.		Petroleum.		
	Wool, dom., Ohio, Pa., W. Va., unwashed, fine delaine, Boston, (per lb.).	Woolen yarn, weaving, 12-16 cut, 4 blood grade Boston, (per lb.).	Woolen cloths, suitings Middlesex, 15 oz. 55-56 in., New York, (per yd.).	Rubber crude, Hevea, first latex crepe, New York, (per lb.).	Rubber tires, pneumatic, plain tread, 30 by 3½ in., Akron, Ohio, (per tire).	Cattle hides, packer, heavy native steers, Chicago, (per lb.).	Men's shoes victrola, blucher, (per pair).	Petroleum, crude, Mid-continent (Kans., Okla.) at wells, (per bbl.).	Fuel oil, Tulsa, Okla., (per bbl.).	Kerosene, refined for export, New York, (per gal.).
Prewar base price...	\$0.2317	\$0.5725	\$1.4813	\$0.6123	\$13.0900	\$0.1861	\$3.1375	\$0.9725	\$0.7979	\$0.0871
Made equal to...	100	100	100	100	100	100	100	100	100	100
1913—Months—										
January.....	122	103	106	175	115	103	99	85	125	98
February....	119	103	106	164	115	97	99	90	125	98
March.....	110	103	106	149	115	97	99	90	125	98
April.....	110	103	106	135	104	98	99	90	125	98
May.....	97	103	106	132	104	89	99	90	110	98
June.....	97	103	106	121	104	94	99	90	110	100
July.....	97	103	106	114	104	95	99	94	110	100
August.....	97	103	106	112	104	100	99	102	94	100
September..	97	103	100	96	104	101	99	105	94	100
October.....	97	103	100	87	104	106	100	105	100	100
November..	97	103	100	93	104	106	100	105	100	100
December...	96	103	100	91	97	105	100	105	100	100
Quarters—										
First.....	117	103	106	163	115	99	99	89	135	98
Second.....	101	103	106	129	104	92	99	90	118	98
Third.....	97	103	104	107	104	99	99	101	99	100
Fourth.....	97	103	100	90	102	106	100	105	100	100
Year.....	103	103	104	122	106	99	99	97	113	98
1914 Months—										
January.....	99	103	100	97	97	97	100	105	100	100
February....	100	103	97	102	97	98	100	107	100	100
March.....	100	107	97	102	97	97	100	107	100	100
April.....	101	90	97	112	97	97	100	102	100	100
May.....	106	90	97	101	97	98	100	76	100	100
June.....	114	90	97	93	97	99	100	76	100	98
July.....	119	90	97	91	97	104	100	76	72	98
August.....	119	90	97	139	97	110	100	76	72	98
September..	114	90	100	96	97	113	102	66	72	98
October.....	106	90	100	95	97	114	102	56	60	98
November..	110	90	100	109	97	117	104	56	60	98
December...	110	90	100	130	97	121	104	56	60	98
Quarters—										
First.....	99	104	98	101	97	97	100	107	100	100
Second.....	107	90	97	102	97	98	100	86	100	100
Third.....	117	90	98	109	97	109	101	74	72	98
Fourth.....	109	90	100	111	97	117	103	56	60	98
Year.....	108	93	98	106	97	105	101	81	83	97
1915—Months—										
January.....	114	90	100	119	97	124	104	56	56	98
February....	132	90	100	100	70	126	104	56	56	98
March.....	140	94	106	105	70	124	104	41	44	98
April.....	127	94	106	99	70	101	104	41	47	87
May.....	127	94	106	98	70	111	104	41	47	87
June.....	123	94	106	102	70	125	104	41	47	87
July.....	127	94	106	105	70	138	104	41	47	86
August.....	132	111	106	100	70	147	104	51	66	86
September...	132	111	106	97	70	142	104	76	66	86
October.....	132	111	106	101	70	142	104	82	78	86
November..	132	111	106	122	70	141	104	82	97	89
December...	136	111	109	143	70	138	105	102	119	94
Quarters—										
First.....	129	91	102	108	79	125	104	51	52	90
Second.....	126	94	106	99	70	112	104	41	47	87
Third.....	130	106	106	101	70	143	104	57	60	86
Fourth.....	133	111	107	122	70	141	104	89	98	90
Year.....	129	100	106	108	72	130	104	60	64	88

RELATIVE PRICES OF CONTROLLED RAW MATERIALS AND THEIR UNCONTROLLED MANUFACTURES.

	Wool.			Rubber.		Hides and skins.		Petroleum.		
	Wool, dom., Ohio, Pa., W. Va., unwashed, fine delaine, Boston, (per lb.).	Woolen yarn, weaving, 12-16 cut, 1 blood grade, Boston, (per lb.).	Woolen cloths, suitings, Middlesex, 15 oz. 55-56 in., New York, (per yd.).	Rubber crude, Hevea, first latex crepe, New York, (per lb.).	Rubber tires, pneumatic, plain tread, 30 by 3½ in., Akron, Ohio, (per tire).	Cattle hides, packer, heavy native steers, Chicago, (per lb.).	Men's shoes, vicicaf, blucher, (per pair).	Petroleum, crude, Mid-continent (Kans., Okla.) at wells, (per bbl.).	Fuel oil, Tulsa, Okla., (per bbl.).	Kerosene, refined for export, New York, (per gal.).
Prewar base price...	\$0.2317	\$0.5725	\$1.4813	\$0.6123	\$13.0900	\$0.1861	\$3.1375	\$0.9725	\$0.7979	\$0.0871
Made equal to...	100	100	100	100	100	100	100	100	100	100
1916—Months—										
January.....	140	111	109	146	77	124	107	125	128	99
February....	140	111	122	140	77	128	108	133	135	102
March.....	145	116	129	147	77	122	110	151	144	102
April.....	145	116	129	136	77	120	112	158	113	103
May.....	145	116	129	117	77	113	115	158	88	103
June.....	145	116	129	105	77	144	120	158	88	103
July.....	149	116	132	95	77	145	120	155	81	103
August.....	151	116	137	95	77	141	120	106	81	104
September..	155	121	141	98	77	140	120	92	81	102
October.....	158	121	141	102	77	143	127	92	88	96
November..	170	121	147	112	77	169	127	93	141	96
December...	186	129	153	129	77	180	135	117	141	96
Quarters—										
First.....	142	113	120	145	77	125	108	137	136	101
Second.....	145	116	129	119	77	132	115	158	96	103
Third.....	152	118	137	96	77	142	120	119	81	103
Fourth.....	171	123	147	114	77	164	130	101	123	96
Year.....	152	118	133	119	77	141	118	129	109	101
1917—Months—										
January.....	196	135	158	127	85	180	151	143	188	99
February....	211	155	173	140	85	171	151	173	188	105
March.....	220	172	173	139	85	164	151	173	188	112
April.....	231	177	182	134	96	164	151	173	188	118
May.....	240	181	197	135	96	169	151	173	188	118
June.....	304	181	213	118	96	177	151	173	172	118
July.....	317	190	228	111	96	177	151	173	172	118
August.....	322	199	243	106	96	172	151	173	172	119
September..	326	199	243	109	105	177	151	204	172	119
October.....	324	199	243	104	105	181	151	204	226	119
November..	324	225	252	98	105	189	151	204	219	128
December...	324	234	252	91	105	188	151	204	219	139
Quarters—										
First.....	209	154	168	135	85	172	151	165	188	105
Second.....	258	180	197	129	96	170	151	173	183	118
Third.....	322	196	238	109	99	176	151	184	172	118
Fourth.....	324	219	249	98	105	186	151	204	221	129
Year.....	278	187	213	118	96	176	151	182	191	118
1918—Months—										
January.....	324	234	255	100	105	176	151	204	219	144
February....	324	242	258	86	105	157	151	204	219	144
March.....	324	284	258	91	105	141	159	204	219	146
April.....	324	301	258	98	116	146	159	229	251	152
May.....	324	301	276	103	116	167	159	229	251	153
June.....	319	301	283	103	116	177	174	229	251	173
July.....	324	301	283	103	116	174	180	229	251	174
August.....	324	301	283	103	116	161	191	229	235	175
September..	319	301	283	103	116	161	205	229	235	178
October.....	319	301	283	103	116	161	207	229	235	178
November..	319	301	283	100	116	156	207	229	235	194
December...	293	301	283	100	116	156	207	229	235	194
Quarters—										
First.....	324	253	257	92	105	160	154	204	219	144
Second.....	322	301	272	101	116	164	164	229	251	160
Third.....	322	301	283	103	116	166	192	229	240	175
Fourth.....	311	301	283	101	116	158	207	229	235	180
Year.....	320	289	274	99	113	161	179	224	236	167

¹ Government control of price began during month.

6. A COMPARISON OF THE PRICES OF CONTROLLED MANUFACTURED GOODS WITH THE PRICES OF THEIR UNCONTROLLED RAW-MATERIALS.

It was exceptional for the Government to initiate control within any family of commodities by a regulation of the finished-product prices only. Since raw-material prices, in the main, fluctuate more violently, the common practice was to begin control by regulating the raw material. The outstanding departure from this procedure during the war was the extension of price control over cotton goods, while at no time was any control exercised over raw cotton.

There are given here relative prices for cotton, upland middling, comparable with others for cotton yarn, carded, white, Northern, mule spun, 22/1 cones. The actual prewar price (July 1, 1913, to June 30, 1914) for each was made equal to 100, and the monthly actual prices from January, 1913, through December, 1918, turned into relatives upon that base.

COTTON YARN, CARDED, WHITE, NORTHERN MULE SPUN, 22/1 CONES.

[Controlled.]

[Prewar price of \$0.2438 made equal to 100.]

	1913	1914	1915	1916	1917	1918
January.....	98	98	78	105	160	235
February.....	100	98	78	105	152	249
March.....	98	98	70	104	148	257
April.....	100	98	78	110	168	281
May.....	100	94	76	112	174	299
June.....	98	90	76	115	180	292
July.....	98	94	76	116	205	1 298
August.....	98	90	79	118	205	287
September.....	103	82	82	125	238	295
October.....	109	82	90	135	197	295
November.....	107	72	94	149	205	373
December.....	107	74	98	170	217	348
First quarter.....	99	98	75	104	153	248
Second quarter.....	100	94	77	112	174	287
Third quarter.....	100	89	79	120	216	287
Fourth quarter.....	107	76	94	151	205	267
Year.....	102	89	81	122	187	373

¹ Government control began.

COTTON, UPLAND MIDDLING.

[Uncontrolled.]

[Prewar price of \$0.1312 made equal to 100.]

	1913	1914	1915	1916	1917	1918
January.....	100	97	63	95	134	247
February.....	98	98	65	89	124	243
March.....	96	101	69	91	142	258
April.....	94	100	78	92	155	242
May.....	91	103	75	98	158	210
June.....	93	103	74	99	194	232
July.....	94	100	70	99	199	238
August.....	92	91	71	111	197	263
September.....	103	64	84	121	173	273
October.....	107	53	95	138	214	248
November.....	104	58	91	153	228	225
December.....	99	58	94	139	233	232
First quarter.....	98	98	66	92	134	249
Second quarter.....	98	102	76	96	168	239
Third quarter.....	96	96	75	110	190	256
Fourth quarter.....	103	58	93	143	224	236
Year.....	97	92	77	110	179	242

The basis for a wider generalization, perhaps, may be had from the weighted index numbers representing 57 series of controlled cotton goods and 24 series of uncontrolled cotton in the raw-materials stage, which also follow as made up earlier in this chapter.

WEIGHTED INDEX NUMBERS OF CONTROLLED COTTON MANUFACTURES AND UNCONTROLLED COTTON RAW MATERIALS.

[Prewar average aggregates made equal to 100.]

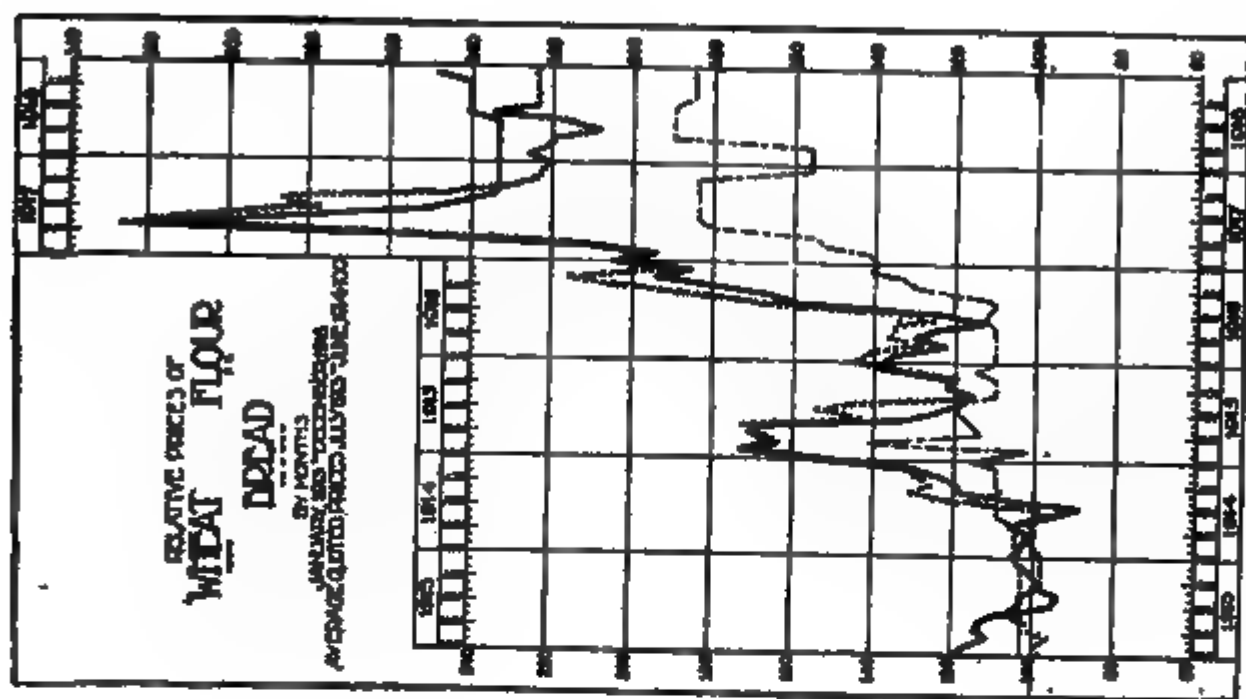
Month.	1913	1914	1915	1916	1917	1918
CONTROLLED.						
January.....	103	100	83	106	158	225
February.....	103	100	84	109	157	233
March.....	103	99	85	110	161	246
April.....	102	99	87	112	169	268
May.....	101	99	89	114	172	270
June.....	100	99	89	116	184	275
July.....	99	99	91	119	193	279
August.....	100	97	92	124	194	283
September.....	100	94	94	128	200	269
October.....	102	89	99	140	206	270
November.....	102	85	102	153	206	270
December.....	102	84	104	160	211	267
First quarter.....	103	100	84	108	159	235
Second quarter.....	101	99	89	114	175	271
Third quarter.....	100	97	93	124	196	277
Fourth quarter.....	102	86	102	151	208	269
Year.....	101	95	92	124	184	263
UNCONTROLLED.						
January.....	100	96	54	94	141	238
February.....	98	98	61	95	138	244
March.....	97	103	61	91	131	248
April.....	97	98	67	95	148	261
May.....	95	100	75	95	156	234
June.....	95	102	71	100	167	225
July.....	95	102	71	103	203	235
August.....	95	102	67	104	200	229
September.....	97	72	70	120	192	264
October.....	110	64	92	128	192	261
November.....	107	52	95	148	224	240
December.....	100	56	93	161	228	227
First quarter.....	98	99	59	93	136	243
Second quarter.....	96	100	71	97	157	240
Third quarter.....	96	92	69	109	198	243
Fourth quarter.....	105	57	93	145	215	243
Year.....	99	87	73	111	176	242

¹ Government control began.

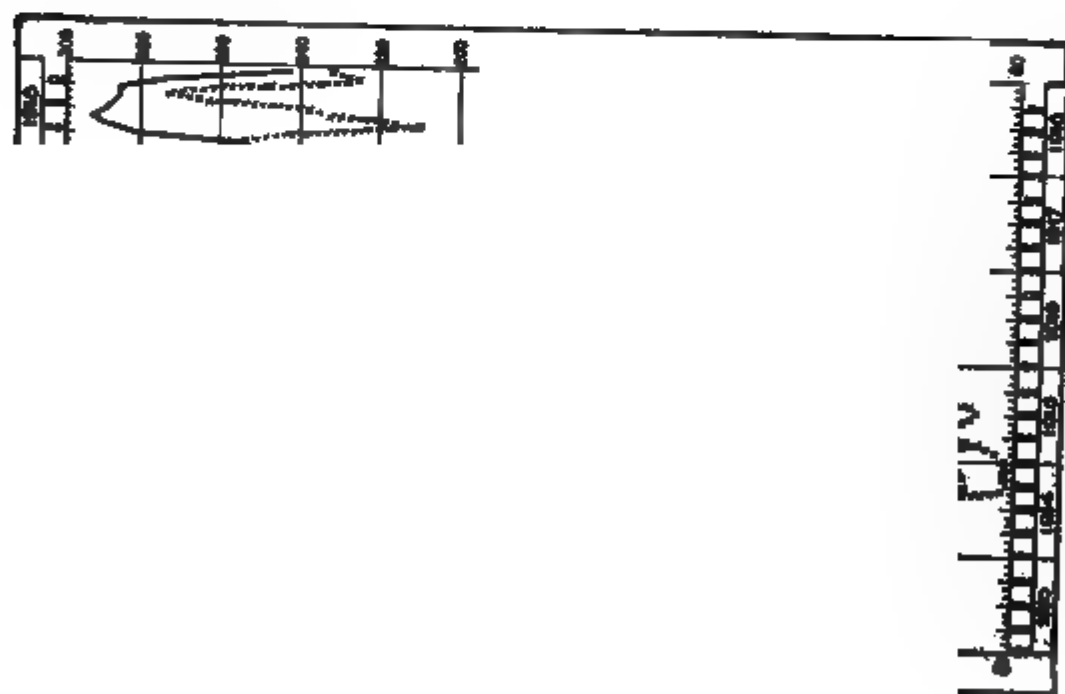
7. A COMPARISON OF CONTROLLED RAW-MATERIAL PRICES WITH THE PRICES OF THEIR CONTROLLED MANUFACTURED PRODUCTS.

A study of the relative movements of important basic commodities which were regulated both in the raw-material and finished-product stages, shows the results of the more rigid controls. The important basic commodities so controlled were wheat, iron and steel, hides and skins, corn, sugar, cattle, and coal. There have been made ready for comparison the following combinations of raw materials and finished products of which all series were controlled: (1) No. 2 red winter wheat; standard patents wheat flour; and loaf bread; (2) iron ore, Mesabi, non-Bessemer, 51½ per cent; pig iron, basic, Mahoning or Shenango Valley Furnace; steel bars, steel sheets, Bessemer; and pipe, cast iron 6 inches; (3) cattle hides, heavy native steers; and, cattle hide leather, sole leather, hemlock packer slaughter, No. 1; (4) corn, yellow cash, No. 3; and corn meal, white, in bulk; (5) raw cane sugar, 96° centrifugal, duty paid; refined cane sugar, fine granulated; beet sugar granulated; (6) steers, choice to prime, heavy beeves; and steer rounds, No. 1; (7) bituminous coal, Pittsburgh No. 8 Ohio; and Connellsville coke.

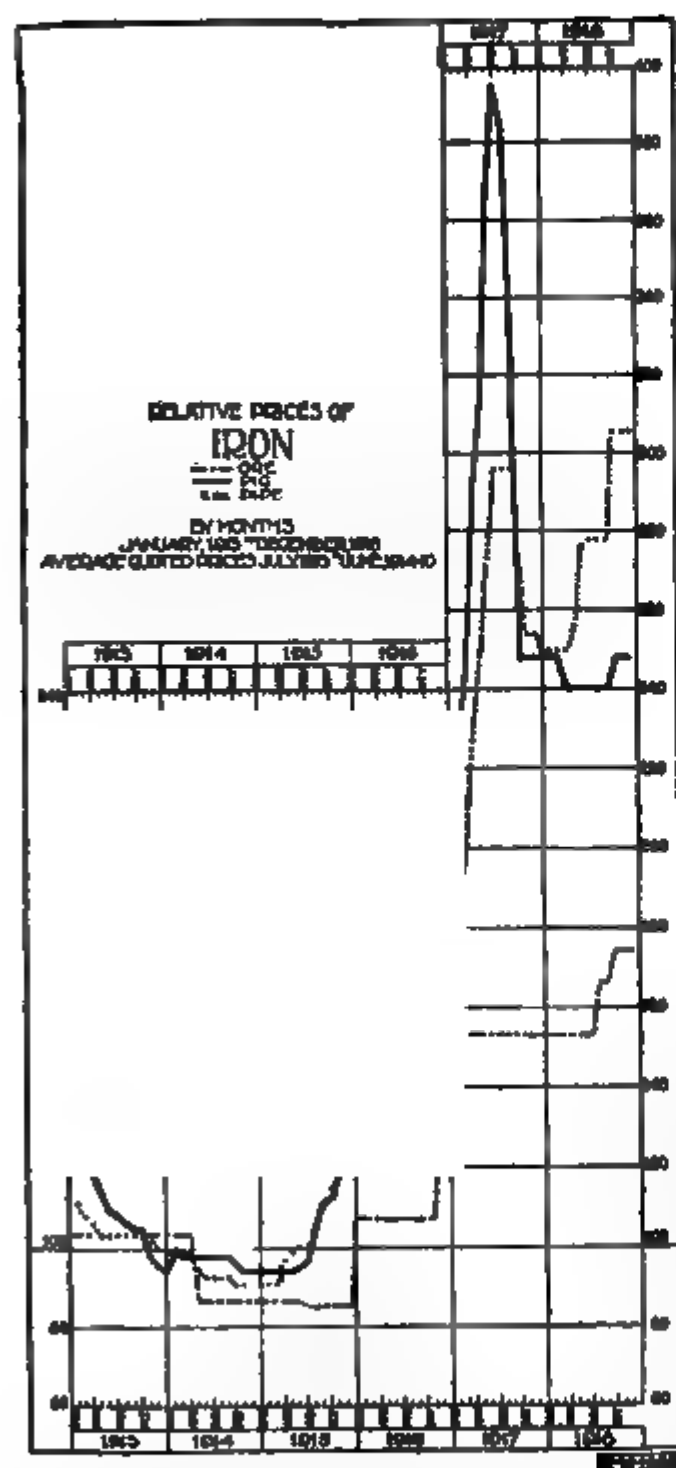
The relative prices of wheat and flour held close together save during 1918. Bread prices did not rise relatively as high either as wheat or flour prices, but behaved more like flour prices than wheat prices. Government control did not bring the pronounced drop in iron ore prices that it brought in pig iron prices, since iron ore prices were fixed near their market level and pig iron prices much below. The behavior of controlled raw and refined sugar prices was nearly identical.



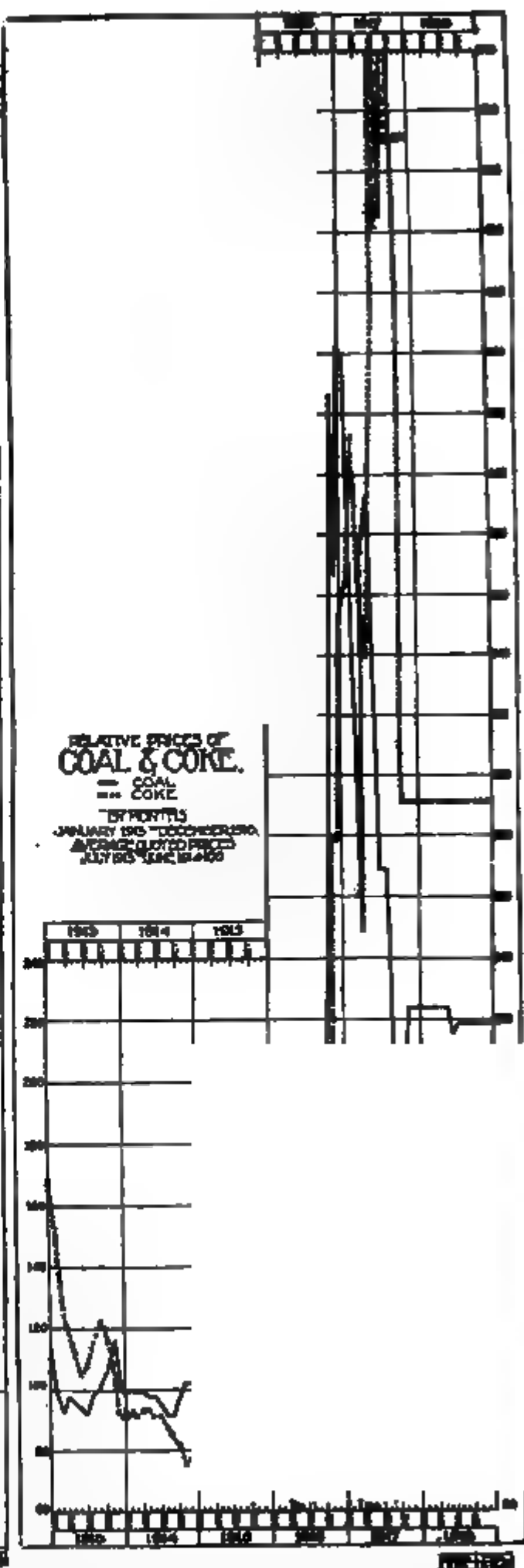
Relative prices.—Wheat, Flour, Bread.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



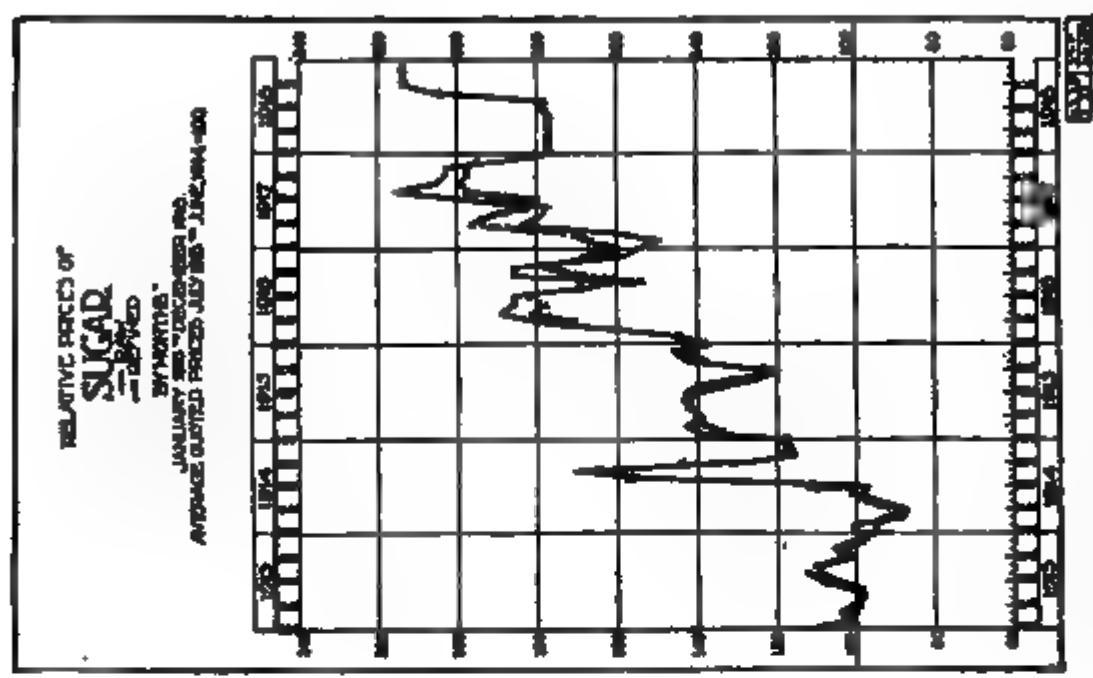
Relative prices.—Cotton yarn, Cotton.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



Relative prices.—Iron: Ore, Pig, and Pipe.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



Relative prices.—Coal and Coke.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914=100.)



Relative prices.—Sugar, raw and refined.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914 = 100.)

Relative prices.—Cattle hides, Sole leather.—By months, January, 1913, to December, 1918. (Average quoted prices, July, 1913, to June, 1914 = 100.)

RELATIVE PRICES OF CONTROLLED RAW MATERIALS AND THEIR CONTROLLED MANUFACTURES.

	Wheat, flour, and bread.			Iron ore, pig iron, steel bars, sheet steel, and pipe.					Cattle, hides, and sole leather.	
	Wheat, No. 2, red, winter, Chicago (per bu.).	Wheat flour, standard patents, Minneapolis (per bbl.).	Bread, loaf, New York (per 16-oz.).	Iron ore, Mesabi, non-Bessemer 51½ per cent, lower lake ports (per gr. ton).	Pig iron, basic, Mahoning or Shonango Valley furnace (per gr. ton).	Sheet bars, Bessemer Pittsburgh (per gr. ton).	Steel, blue, annealed sheets, 10-gauge, Pittsburgh (per cwt.).	Pipe, cast-iron, 6-inch, New York (per sh. ton).	Cattle hides, packer, heavy, native steers, Chicago (per lb.).	Sole leather, hemlock, packer, slaughter, No. 1, Chicago (per lb.).
Prewar base price	\$0. 9321	\$4. 5699	\$0. 0412	\$3. 3083	\$13. 3183	\$22. 6750	\$1. 4983	\$22. 2258	\$0. 1861	\$0. 3192
Made equal to 1913—Months—	100	100	100	100	100	100	100	100	100	100
January..	120	98	103	103	123	128	113	112	103	94
February	116	99	103	103	122	132	117	111	97	94
March....	111	96	103	103	121	132	117	107	97	94
April.....	114	101	103	103	119	125	117	106	93	94
May.....	113	102	103	103	114	121	117	103	89	94
June.....	109	106	103	103	109	119	117	103	94	94
July.....	95	104	103	103	108	121	117	103	95	94
August...	93	103	103	103	106	116	113	103	100	94
September....	99	100	103	103	105	110	109	103	101	94
October..	99	98	103	103	104	101	105	103	106	100
November....	101	98	103	103	98	95	101	103	106	100
December....	103	98	103	103	95	93	100	100	105	100
Quarters—										
First.....	116	98	103	103	122	131	116	110	99	94
Second...	112	103	103	103	114	122	117	104	92	94
Third.....	96	102	103	103	106	116	113	103	99	94
Fourth...	101	98	103	103	99	96	102	102	106	100
Year.....	106	100	103	103	110	116	112	105	99	94
1914—Months—										
January..	104	98	105	103	94	91	93	99	97	100
February	103	100	104	103	99	97	93	99	98	100
March....	102	101	104	103	98	97	93	99	97	100
April.....	101	100	104	103	98	96	93	99	97	100
May.....	105	101	104	86	98	93	91	94	98	100
June.....	96	98	109	86	98	90	90	92	99	100
July.....	88	101	107	86	98	88	90	92	104	100
August...	103	121	107	86	98	93	91	92	110	100
September....	119	130	107	86	98	96	93	92	113	100
October..	119	126	109	86	96	91	95	90	114	100
November....	123	129	109	86	94	87	93	90	117	100
December....	129	130	109	86	94	86	89	90	121	100
Quarters—										
First.....	103	100	104	103	97	95	93	99	97	100
Second...	100	100	105	92	98	93	92	95	98	100
Third.....	103	117	107	86	98	92	91	92	109	100
Fourth...	124	128	109	86	95	88	93	90	117	100
Year.....	108	112	106	92	97	92	92	94	105	100
1915—Months—										
January..	149	150	115	86	94	87	87	90	124	106
February	173	169	102	86	94	87	87	90	126	106
March....	164	164	141	86	94	87	87	90	124	106
April.....	171	169	113	86	94	88	89	97	101	100
May.....	168	172	115	86	94	88	90	99	111	100
June.....	132	144	117	86	95	90	89	100	125	100
July.....	125	154	119	85	96	97	88	101	128	100
August...	118	138	119	85	106	106	91	105	147	100
September....	115	117	109	85	111	112	101	110	142	100
October..	121	121	109	85	113	115	107	114	142	114
November....	121	120	109	85	118	117	127	119	141	114
December....	132	136	115	85	131	135	151	124	138	114
Quarters—										
First.....	162	161	119	86	94	87	87	90	125	106
Second...	157	162	115	86	94	89	89	99	112	101
Third.....	119	136	115	85	104	105	93	105	143	107
Fourth...	125	126	111	85	121	122	128	119	141	114
Year.....	141	146	115	85	103	101	99	103	130	107

RELATIVE PRICES OF CONTROLLED RAW MATERIALS AND THEIR CONTROLLED MANUFACTURES.

	Wheat, flour, and bread.			Iron ore, pig iron, steel bars, sheet steel, and pipe.					Cattle, hides, and sole leather.	
	Wheat, No. 2, red, winter, Chicago (per bu.).	Wheat flour, standard patents, Minneapolis (per bbl.).	Bread, loaf, New York (per 16-oz.).	Iron ore, Mesabi, non-Bessemer 51½ per cent, lower lake ports (per gr. ton).	Pig iron, basic, Mahoning or Shenango Valley furnace (per gr. ton).	Sheet bars, Bessemer Pittsburgh (per gr. ton).	Steel, blue, annealed sheets, 10-gauge, Pittsburgh (per cwt.).	Pipe, cast-iron, 6-inch, New York (per sh. ton).	Cattle hides, packer, heavy, native steers, Chicago (per lb.).	Sole leather, hemlock, packer, slaughter, No. 1, Chicago (per lb.).
Prewar base price	\$0.9321	\$4.5699	\$0.0412	\$3.3083	\$13.3183	\$22.6750	\$1.4983	\$22.2258	\$0.1861	\$0.3192
Made equal to 1916—Months—	100	100	100	100	100	100	100	100	100	100
January..	128	145	109	107	134	143	170	120	124	111
February	135	141	109	107	133	150	177	132	128	114
March....	122	129	109	107	137	181	190	134	122	114
April.....	130	136	109	107	136	198	197	137	120	117
May.....	124	135	109	107	135	190	200	137	133	122
June.....	112	126	111	107	135	185	200	137	144	122
July.....	124	133	111	107	135	187	194	137	145	122
August...	158	166	109	107	135	203	194	137	141	122
September	165	184	111	107	137	198	194	139	140	122
October..	180	203	129	107	149	212	210	142	143	127
November	194	215	132	107	188	238	225	160	169	174
December	185	190	141	153	225	259	244	184	180	188
Quarters—										
First.....	132	138	109	107	134	158	179	132	125	113
Second...	122	133	109	107	135	191	199	137	132	121
Third.....	149	161	110	107	136	196	194	138	142	122
Fourth...	187	203	134	122	188	236	226	162	164	163
Year.....	147	159	115	111	148	195	209	142	141	130
1917—Months—										
January..	204	202	139	153	225	280	284	187	180	190
February	198	198	141	153	225	287	300	187	171	189
March....	212	211	152	153	242	300	314	196	164	188
April.....	265	254	155	153	291	331	360	233	164	188
May.....	319	326	179	153	312	414	447	250	169	187
June.....	283	304	183	153	366	463	534	273	177	185
July.....	250	279	183	153	394	463	551	295	177	185
August...	242	286	183	153	384	414	534	295	172	172
September	234	246	183	153	321	353	534	295	177	166
October..	233	232	183	153	248	260	501	270	181	157
November	233	224	183	153	248	225	296	254	189	160
December	233	222	155	153	248	225	284	254	188	160
Quarters—										
First.....	205	203	144	153	230	289	299	189	172	189
Second...	291	297	172	153	322	408	447	252	170	187
Third.....	243	271	183	153	368	410	539	295	176	174
Fourth...	233	226	173	153	248	237	360	260	186	159
Year.....	244	249	168	153	292	335	410	249	176	177
1918—Months—										
January..	233	221	155	153	248	225	284	249	176	156
February	233	225	155	153	248	225	284	249	157	152
March....	233	221	155	153	248	225	284	249	141	149
April.....	233	219	189	153	240	225	284	249	146	149
May.....	233	208	189	153	240	225	284	256	167	157
June.....	233	215	189	153	240	225	284	276	177	165
July.....	241	234	189	153	240	225	284	278	174	169
August...	240	223	189	166	240	225	284	278	161	169
September	240	223	185	166	240	225	284	278	161	171
October..	240	223	185	174	248	225	284	305	161	172
November	240	223	185	174	248	225	284	305	156	174
December	248	223	185	174	248	225	270	305	156	175
Quarters—										
First.....	233	222	155	153	248	225	284	249	160	149
Second...	233	214	189	153	240	225	284	260	164	157
Third.....	240	228	187	162	240	225	284	278	166	170
Fourth...	242	223	185	174	248	225	279	305	158	174
Year.....	237	222	179	160	244	225	283	273	161	163

¹ Government control of price began during month.

RELATIVE PRICES OF CONTROLLED RAW MATERIALS AND THEIR CONTROLLED MANUFACTURES.

	Corn and corn-meal.		Raw sugar, refined cane sugar, beet sugar, granulated.			Steers and steer rounds.		Bituminous coal and coka.	
	Corn, cash, No. 3 yellow, Chicago (per bu.).	Corn-meal, white, in bulk, Terre Haute (per cwt.).	Sugar, raw, 96° centrifugal, New York (per lb.).	Sugar, refined, granulated, New York (per lb.).	Sugar, standard, beet, granulated, Chicago (per lb.).	Steers, choice to prime, heavy beeves, Chicago (per cwt.).	Steer rounds, No. 1, Chicago (per lb.).	Coal, bituminous, Pittsburgh, No. 8, Ohio, Columbus, and Detroit (per sh. ton).	Coke, Connellsville furnace, f. o. b. ovens (per sh. ton).
Prewar base price.	\$0.6859	\$1.6962	\$0.0340	\$0.0413	\$0.0426	\$9.1022	\$0.1295	\$1.0900	\$2.0625
Made equal to.	100	100	100	100	100	100	100	100	100
1913—Months—									
January.....	70	74	104	109	109	99	97	113	178
February.....	71	75	102	101	101	98	97	98	149
March.....	74	83	104	101	101	98	96	93	134
April.....	81	94	100	99	99	98	99	97	113
May.....	83	94	98	99	99	95	103	96	104
June.....	89	97	98	100	100	96	104	94	107
July.....	90	100	104	108	108	99	108	92	115
August.....	108	107	109	112	110	98	108	99	121
September.....	110	111	109	110	109	100	104	100	119
October.....	102	102	102	101	100	100	104	106	106
November.....	106	97	106	102	101	98	99	115	98
December.....	100	98	99	99	98	98	97	100	91
Quarters—									
First.....	72	78	104	104	108	98	96	101	150
Second.....	84	95	99	100	99	96	102	96	108
Third.....	104	106	108	110	109	99	107	97	113
Fourth.....	102	99	103	101	100	99	100	107	97
Year.....	90	94	103	104	103	98	101	100	118
1914—Months—									
January.....	91	95	99	95	96	101	93	98	93
February.....	90	97	101	95	96	101	90	99	93
March.....	95	96	88	92	93	102	96	99	91
April.....	99	96	87	90	91	102	93	99	93
May.....	102	97	94	96	96	100	101	97	93
June.....	104	106	99	101	101	101	108	97	91
July.....	104	105	97	102	102	106	114	95	91
August.....	118	118	154	157	156	110	117	91	87
September.....	115	115	170	165	162	116	115	91	84
October.....	107	104	131	144	143	115	107	96	81
November.....	100	99	115	119	118	112	100	102	73
December.....	94	97	117	117	117	107	98	102	79
Quarters—									
First.....	92	96	96	94	95	101	93	99	83
Second.....	102	100	94	96	96	101	101	98	83
Third.....	114	113	141	141	140	111	116	92	87
Fourth.....	101	101	122	127	125	111	102	100	78
Year.....	102	102	113	114	114	106	97	97	88
1915—Months—									
January.....	104	95	119	118	118	101	90	103	79
February.....	108	100	139	134	133	94	89	105	76
March.....	105	98	143	138	138	95	89	95	76
April.....	110	100	139	140	139	92	86	94	79
May.....	111	101	142	142	140	95	96	88	79
June.....	109	96	144	142	141	102	102	90	79
July.....	114	103	143	141	140	109	104	89	85
August.....	119	100	140	133	131	108	106	94	81
September.....	112	98	126	123	122	107	105	95	81
October.....	93	84	122	120	118	106	97	98	87
November.....	93	82	143	138	129	109	98	97	115
December.....	97	90	146	143	127	106	93	100	112
Quarters—									
First.....	106	98	133	130	130	97	89	101	77
Second.....	110	99	142	142	140	96	95	91	79
Third.....	114	99	137	132	131	108	105	92	83
Fourth.....	94	86	136	134	127	107	96	99	108
Year.....	107	95	137	135	132	102	96	96	87

RELATIVE PRICES OF CONTROLLED RAW MATERIALS AND THEIR CONTROLLED MANUFACTURES.

	Corn and corn-meal.		Raw sugar, refined cane sugar, beet sugar, granulated.			Steers and steer rounds.		Bituminous coal and coke.	
	Corn, cash, No. 3, yellow, Chi- cago (per bu.).	Corn- meal, white, in bulk, Terre Haute (per cwt.).	Sugar, raw, 96° centri- fugal, New York (per lb.).	Sugar, refined, granu- lated, New York (per lb.).	Sugar, stand- ard, beet, granu- lated, Chi- cago (per lb.).	Steers, choice to prime, heavy beeves, Chi- cago (per cwt.).	Steer rounds, No. 1, Chi- cago (per lb.).	Coal, bitu- minous, Pitts- burgh, No. 8, Ohio, Colum- bus, and De- troit (per sh. ton).	Coke, Con- nells- ville furnace, f. o. b. ovens (per sh. ton).
Prewar base price.....	\$0.6859	\$1.6962	\$0.0340	\$0.0413	\$0.0426	\$9.1022	\$0.1295	\$1.0900	\$2.0625
Made equal to.....	100	100	100	100	100	100	100	100	100
1916—Months—									
January.....	111	99	137	139	127	104	89	96	139
February.....	108	101	145	145	141	102	89	97	127
March.....	106	102	164	160	157	106	97	95	145
April.....	111	109	180	171	169	107	103	102	137
May.....	109	104	189	181	178	111	106	102	115
June.....	106	106	185	178	179	121	117	103	127
July.....	117	117	186	182	178	118	116	103	127
August.....	125	123	169	169	165	115	118	103	127
September.....	126	123	159	154	149	119	119	123	133
October.....	141	131	186	171	166	120	111	223	152
November.....	143	148	186	178	174	126	106	425	279
December.....	133	141	158	168	164	126	102	366	279
Quarters—									
First.....	107	100	143	143	144	104	91	96	137
Second.....	109	107	184	177	176	113	106	102	126
Third.....	123	121	172	169	164	118	117	109	129
Fourth.....	139	140	175	172	168	124	106	340	236
Year.....	123	117	170	167	163	115	106	162	157
1917—Months—									
January.....	144	147	154	160	156	126	100	442	352
February.....	146	149	149	166	162	130	106	438	364
March.....	164	164	162	171	176	137	113	335	412
April.....	218	221	184	197	187	143	126	248	352
May.....	240	243	179	192	187	145	129	374	339
June.....	252	243	177	183	176	147	133	392	461
July.....	301	288	196	180	183	149	135	269	594
August.....	301	328	216	198	187	159	134	269	485
September.....	301	313	205	199	191	179	154	184	570
October.....	292	302	203	198	173	181	154	184	291
November.....	266	299	203	198	173	171	146	224	291
December.....	244	287	189	195	175	156	139	224	291
Quarters—									
First.....	152	154	156	166	165	131	107	405	376
Second.....	235	237	180	191	184	144	130	338	384
Third.....	301	310	205	193	186	162	142	240	549
Fourth.....	265	296	198	197	174	170	146	211	291
Year.....	239	248	185	187	176	152	131	299	400
1918—Months—									
January.....	240	285	177	180	177	151	135	224	291
February.....	243	321	177	177	178	151	132	224	291
March.....	228	304	177	177	177	153	138	224	291
April.....	228	315	177	177	177	177	146	224	291
May.....	216	270	177	177	177	192	177	224	291
June.....	221	262	177	177	178	196	198	215	291
July.....	234	284	178	178	183	199	203	219	291
August.....	242	262	178	178	183	204	209	219	291
September.....	226	235	205	205	209	211	209	219	291
October.....	193	200	214	214	217	211	203	219	291
November.....	189	178	214	214	217	214	188	219	291
December.....	212	191	214	214	217	218	178	219	291
Quarters—									
First.....	236	303	177	178	177	151	135	224	291
Second.....	221	281	177	177	177	187	175	222	291
Third.....	234	261	186	186	191	205	207	219	291
Fourth.....	197	189	214	214	217	214	189	219	291
Year.....	222	259	189	189	191	190	177	221	291

¹ Government control of price began during month.

8. A COMPARISON OF CONTROLLED PRICES AT WHOLESALE WITH CORRESPONDING CONTROLLED PRICES AT RETAIL.

The great bulk of regulation over prices administered by the Federal Government during the war pertained to producer or wholesale prices. There was no real attempt, save in food and fuel, to control prices at retail. The task of controlling retail prices, infinitely more difficult than that of controlling wholesale prices, was undertaken in a comprehensive manner by the Food Administration after its wholesale control was well underway. Since the consumer was more directly concerned with the effects of retail control, there attaches peculiar interest to the relative prices at which foods at wholesale and those at retail were held after control began late in 1917. There follows a tabulation of relative prices for 25 leading food commodities at wholesale and at retail, which were made strictly comparable by letting their respective prewar basis (average actual price for 1913) equal 100.¹

¹ These relative prices were made from representative actual retail prices, quoted at various cities throughout the United States, as compiled by the Bureau of Labor Statistics.

[The initials W = wholesale; R = retail.]

Article and city.	1913: Aver- age for year.	July—			1917				1918				1919				
		1914	1915	1916	Jan.	Apr.	July.	Oct.	Jan.	Apr.	July.	Oct.	Dec.	Jan.	Feb.	Mar.	Apr.
Beef, Chicago: Steer loin ends (hips).....W...	100	104	95	123	119	119	113	140	119	137	202	202	190	190	190	202	190
Sirloin steak.....R...	100	112	111	121	114	126	130	132	130	145	163	162	159	162	163	164	171
Beef, Chicago: Steer rounds, No. 2.....W...	100	111	109	111	92	118	130	145	126	141	191	198	168	168	168	176	183
Round steak.....R...	100	115	113	119	112	127	132	135	135	151	173	170	167	168	170	170	177
Beef, Chicago: Steer ribs, No. 2.....W...	100	105	92	111	102	134	127	146	127	140	178	197	191	191	.....	.....	.....
Rib roast.....R...	100	109	109	117	114	124	126	127	130	148	163	161	158	159	164	166	175
Beef, New York: No. 2 loins, city.....W...	100	116	108	127	114	120	120	174	149	165	177	222	222	234	222	247	253
Sirloin steak.....R...	100	106	109	114	110	123	130	137	133	147	170	169	166	173	173	173	175
Beef, New York: No. 2 rounds, city.....W...	100	112	112	120	107	140	145	157	149	165	231	223	207	207	198	198	198
Round steak.....R...	100	108	109	116	110	127	135	145	141	154	186	182	182	190	188	188	189
Beef, New York: No. 2 ribs, city.....W...	100	109	106	119	106	132	126	182	156	166	185	212	225	232	232	232	238
Rib roast.....R...	100	103	104	111	109	124	128	137	135	149	172	171	182	188	188	187	189
Pork, Chicago: Loins.....W...	100	111	101	111	111	161	168	221	181	195	195	228	215	181	175	201	211
Chops.....R...	100	107	106	114	119	150	154	188	166	174	187	205	192	185	175	187	199
Pork, New York: Loins, western.....W...	100	107	101	109	112	155	155	197	174	181	201	243	224	217	217	211	227
Chops.....R...	100	106	100	110	114	147	150	184	160	169	187	215	197	201	184	183	201
Bacon, Chicago: Short clear sides.....W...	100	109	89	125	124	172	194	250	237	217	216	229	243	232	215	231	257
Sliced.....R...	100	108	107	112	107	134	149	162	169	177	186	202	202	210	194	194	198
Ham, Chicago: Smoked.....W...	100	105	98	114	113	146	146	170	180	181	181	202	220	213	204	201	213
Smoked, sliced.....R...	100	127	123	131	125	144	156	165	161	176	185	195	201	208	196	191	205
Lard, New York: Prime, contract.....W...	100	95	73	121	145	195	183	224	224	239	238	242	243	220	230	255	284
Pure, tub.....R...	100	98	94	105	133	164	171	196	206	209	201	213	213	207	199	211	225
Lamb, Chicago: Dressed, round.....W...	100	114	128	128	134	148	174	181	161	195	208	161	161	188	195	221	221
Leg of, yearling.....R...	100	111	105	117	117	133	145	159	155	180	180	163	167	173	183	187	193
Poultry, New York: Dressed fowls.....W...	100	103	96	118	121	146	136	157	164	187	198	190	190	195	179	191	195
Dressed hens.....R...	100	103	102	120	122	137	134	151	152	.....	192	192	187	191	185	189	195

RELATIVE WHOLESALE AND RETAIL PRICES OF FOODS—Continued.

[The initials W—wholesale; R—retail.]

Article and city.	1913: Aver- age for year.	July—			1917			1918			1919		
		1914		1915	1916	Jan.	Apr.	July.	Oct.	Jan.	Feb.	Mar.	Apr.
Butter, Chicago:													
Creamery, extra.....	100	85	85	85	89	119	142	121	140	158	147	193	197
Creamery, extra.....	100	86	89	89	93	121	134	119	135	150	148	177	186
Butter, New York:													
Creamery, extra.....	100	87	84	84	88	122	139	122	137	158	154	184	194
Creamery, extra.....	100	86	88	88	91	120	134	119	135	150	152	176	191
Butter, San Francisco:													
Creamery, extra.....	100	77	84	84	80	112	123	121	145	167	170	177	183
Creamery, extra.....	100	85	87	87	86	110	116	117	140	155	162	166	162
Milk, Chicago:													
Fresh.....	100	95	97	97	95	118	142	124	195	184	205	179	168
Fresh, bottled, delivered.....	100	100	100	100	101	125	125	125	161	149	175	163	163
Milk, New York:													
Fresh.....	100	86	86	86	89	146	140	143	206	231	231	217	174
Fresh, bottled, delivered.....	100	100	100	100	100	111	121	127	153	167	178	172	172
Milk, San Francisco:													
Fresh.....	100	100	97	97	97	97	97	110	151	169	190	190	190
Fresh, bottled.....	100	100	100	100	100	100	100	100	121	121	140	140	140
Eggs, Chicago:													
Fresh, firsts.....	100	83	74	74	96	215	135	137	164	250	172	170	174
Strictly fresh.....	100	89	85	85	101	190	129	139	161	223	158	158	160
Eggs, New York:													
Fresh, firsts.....	100	86	80	80	97	208	133	141	161	259	187	165	168
Strictly fresh.....	100	89	82	82	94	168	107	120	158	204	152	143	143
Eggs, San Francisco:													
Fresh.....	100	86	82	82	90	142	105	119	162	228	140	140	172
Strictly fresh.....	100	91	83	83	89	129	100	105	163	190	119	120	139
Meal, corn, Chicago:													
Fine.....	100	114	.....	.....	126	171	257	321	371	264	229	214	229
Fine.....	100	97	107	107	107	145	172	200	245	241	193	190	200
Potatoes, Chicago:													
White, good to choice.....	100	237	66	66	160	286	458	429	185	200	180	170	180
White.....	100	182	78	78	151	263	384	331	185	187	160	167	167
Sugar, New York:													
Granulated.....	100	98	137	137	174	153	188	172	191	170	206	205	205
Granulated.....	100	94	129	129	101	151	178	171	198	198	202	202	204

9. A COMPARISON OF WAR PRICES IN THE UNITED STATES, ENGLAND, FRANCE, AND CANADA.

The world price revolution which followed close upon the heels of the war in Europe, and the widespread control over prices which the Governments exercised, make the price student eager to measure the relative successes of our Government and foreign Governments in stabilizing prices. There are many reasons why caution must be exercised while measuring the effects of regulation upon domestic and European prices. The paramount difficulty, which can never be entirely overcome or discounted, is that Europe went to war and began her control nearly three years ahead of the United States. The United States, which did not set maximum prices until the price level had reached a high point, had by far the easier control problem. There are, despite these difficulties, certain devices which help to measure the relative rises of prices here and abroad during their various control periods.

It is not permissible statistically to judge the relative degrees of stabilization that were brought to various price levels, except by a comparison of identical prices. The difficulty of finding foreign quotations, not to mention that of weighting the few available, makes expedient the rejection of the Price Section index number for this country and the making anew of one to match each foreign index number constructed. There were compiled, as the basis for making American index numbers, 150 commodity prices for England; 44 for France; 36 for Italy; and 270 for Canada. These actual prices, after reducing them to their smallest monetary unit but without assigning weights, were turned into relative prices by letting the average pre-war (July 1, 1913, to June 30, 1914) actual price of each series equal 100. They were then matched by a like number of corresponding price series for the United States which also were turned into relatives. The resulting set of index numbers for each country, made from the medians of relative prices, is strictly comparable with the corresponding set of index numbers made from corresponding prices in the United States. The comparison of prices in England and the United States, made more in detail by the separation of food, iron and steel, clothing, and chemical prices from the two index numbers, is much the most significant of these studies:

LISTING IN DETAIL OF EACH SERIES OF FOREIGN PRICES FROM WHICH VARIOUS FOREIGN INDEX NUMBERS WERE MADE, AND FOR WHICH IDENTICAL SERIES OF DOMESTIC PRICES WERE CHOSEN TO MAKE STRICTLY COMPARABLE INDEX NUMBERS FOR THE UNITED STATES.

UNITED KINGDOM.

[150 commodities.]

Acetone.	Cotton yarn, 60's twist, Egyptian.
Acid, muriatic Tw. .	Cotton yarn, 40's weft.
Acid, acetic, 60 per cent.	Creosote, ordinary good liquid.
Acid, carbolic, crystals, 34/35°.	Ducks, London, live.
Acid, nitric, 80°.	Eggs, British, first quality.
Acid, oxalic.	Flour, wheat, Town Household.
Acid, sulphuric, 168°.	Fowls, live.
Acid, tartaric, powder.	Fustic, Jamaica.
Alumina, sulphate of, pure.	Gambier.
Ammonia, anhydrous.	Glue, best bone (bone liquid glue).
Ammonia, sulphate of.	Glycerin, industrial, S. C., 1,260°.
Aniline oil, pure.	Hams, American, green, long cut.
Arsenic, white, powdered.	Hay, best.
Bacon, Canadian, green sides.	Hemp, manila.
Barley, British Gazette price.	Hides, cattle, 50/59.
Barium, sulphate of, native levigated.	Hides, cattle, 60/69.
Beans, English.	Hides, cattle, 70/79.
Beef, British.	Hides, cattle, dry and dry salted, Central American.
Benzol, 50/90 per cent.	Hides, cattle, salted, Australian.
Bleaching powder.	Hogs, porkers.
Brass sheets.	Indigo, Bengal, good red violet.
Burlap, bags, Chilean oats and barley.	Iron, bars, unmarked, South Staffordshire.
Butter, British, first quality.	Iron bars, Welsh ports.
Cabbages.	Iron hoops, ordinary bedstead.
Calcium, chloride of.	Iron, pig, Middlesborough, good marked bars.
Casein.	Lamb, Argentine.
Cattle, store, shorthorns, yearling.	Lard, American, boxes.
Cement, Portland.	Lead, acetate of, white.
Cheese, Canadian.	Lead, carbonate of (white lead), pure.
Coal, anthracite, best malting.	Lead, nitrate of.
Coal, Lancashire, best house.	Lead, red.
Coal, steam, best Lancashire.	Lead, soft, foreign.
Coal, steam, smalls, best Cardiff.	Lime.
Cocoa, Grenada, good to fine.	Lime, acetate of, gray, 80 per cent.
Coffee, Costa Rica, good to fine.	Logwood, Campeche.
Coke, furnace, best, South Wales.	Lumber, Dantzic and Memel.
Copper, English selected.	Magnesium, sulphate of.
Copper, standard.	Mutton, Argentine, frozen.
Copper sheets, sheathing and rods.	Mutton, English.
Copper, sulphate of.	Oatmeal, Aberdeen.
Copper wire.	Oats, British Gazette price.
Copperas, green, in bulk.	Oil, coconut, crude.
Cotton, American, middling.	Oil, cottonseed.
Cotton, cloth, 32-inch printed, 116 yards, 16 by 16, 32/50.	Oil, linseed.
Cotton cloth, 32-inch shirtings, 76 yards, 19 by 19, 32's/40's.	

Onions, Valencia.
 Petroleum, American.
 Pork, British.
 Potassium, bichromate of.
 Potassium, chlorate of.
 Potassium, muriate of.
 Potassium, nitrate of.
 Potassium, permanganate of.
 Potassium, sulphate of, 90 per cent.
 Potatoes, English.
 Rice, Bassein.
 Rubber, Para, fine hard.
 Sheep, fat stock, Welsh.
 Shellac, T. N. orange, fair.
 Silk, Cossimbuzzar, raw.
 Silk, Italian.
 Silk, Japan.
 Silver, metal.
 Skins, calf, 12/16.
 Skins, calf, light.
 Skins, kip, first quality.
 Soda, ash, carbonated, 58 per cent (ammonia alkali).
 Sodium, bicarbonate of, crystals.
 Sodium, borate of (borax), crystals.
 Sodium, hydrate of (75 per cent C. soda).
 Sodium, nitrate of, 95 per cent.
 Sodium, silicate of (liquid 100° Tw.).
 Sodium, sulphate of (salt cake).
 Sodium, sulphide of, conc.
 Steel, rails, heavy.
 Steel, sheets, doubles.
 Steel, sheets, galvanized, flat, annealed, 18 g., South Wales.

Steel, strip, mild Siemens, for nails, hinges, etc.
 Sugar, cane (West Indian sirups).
 Sulphur, brimstone, best thirds.
 Tallow, imported.
 Tea, Congow.
 Tin, English ingots.
 Tin plates, Bessemer steel coke or Siemens (coke finish).
 Tobacco, Virginia leaf (in bond).
 Turpentine, American.
 Veal, British, first quality.
 Wheat, British Gazette price.
 Wood pulp, chemical, soda unbleached.
 Wood pulp, chemical, sulphite, bleached, good quality.
 Wood pulp, mechanical, 50 per cent moist, unwrapped.
 Wool, Cape firsts.
 Wool, good Victoria.
 Wool, domestic, Lincoln hogs.
 Wool, domestic, Scotch blackface.
 Wool, Shropshire hogs.
 Wool, tops, colonial, 40's prepared.
 Wool, tops, colonial, 50's.
 Wool, tops, colonial, 60's, super.
 Wool, tops, colonial, 70's.
 Wool, yarns, 2/48 white botany.
 Wool, yarns, 3/12 white scoured hosiery (40's).
 Wool, yarns, 2/32's, worsted crossbred.
 Wool, yarns, 2/40's, worsted crossbred.
 Zinc, pig (spelter), ordinary foreign.
 Zinc, sulphate of.

FRANCE.

[44 commodities.]

Acid, hydrochloric.
 Acid, sulphuric.
 Ammonia, sulphate of.
 Barley.
 Beef, first to third quality, dressed.
 Butter, from all sources.
 Cocoa, Haiti.
 Coffee, Santos.
 Copper, ingots, for manufacturing of brass.
 Cotton, Louisiana ordinary.
 Flour, Corbell brand.
 Gasoline, mineral.
 Glycerin, lixivation.
 Glycerin, saponification.
 Hay.
 Lard, American.

Lead, various origins.
 Lime, chloride of.
 Mutton, first to third quality, dressed.
 Oats, black (or gray).
 Oil, colza.
 Oil, linseed.
 Oil, palm.
 Petroleum, refined.
 Pork, first to third quality, dressed.
 Potatoes.
 Rice, Saigon, importation.
 Rubber, fine, Para.
 Rye.
 Silk, raw, Cevennes, second class, 12/16.
 Soap, white, pure, olive oil.
 Soda, carbonate of.

Soda, caustic, salts of (for manufacturing).	Tin, English, from Cornwall.
Soda, nitrate of.	Tin, Straits Settlements.
Straw.	Wheat, national.
Sugar, refined, beet, first quality.	Wine, Rousillon, 10-11°.
Superphosphate.	Wool, Buenos Aires.
Tallow, native, fresh melted.	Zinc, of Silesia.

CANADA.

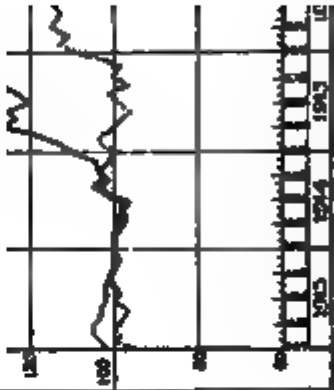
[270 commodities.]

A listing of the specific series which went into the making of this index number, which is of less importance for the purposes of this inquiry than those previous, may be had by reference to the index number made by the Canadian Department of Labor.

The medians of relative prices of 150 identical commodities in England and the United States, show that English prices rose earlier and higher than American prices. While England had a more difficult control problem, because she started regulation before prices had adjusted themselves to the war pressure, the general rise of English prices was not stopped by regulatory measures. The level of American prices, after this country began control, shows a marked stability by comparison with the continued British rises. Food prices were held relatively much lower in the United States than in England, as were chemical prices. The prices of iron and steel, on the other hand, were stabilized on a somewhat lower level relatively in England than in the United States. The prices of clothing rose and fell relatively about the same in England and the United States, though the rise and fall were both slightly earlier in this country than in England.

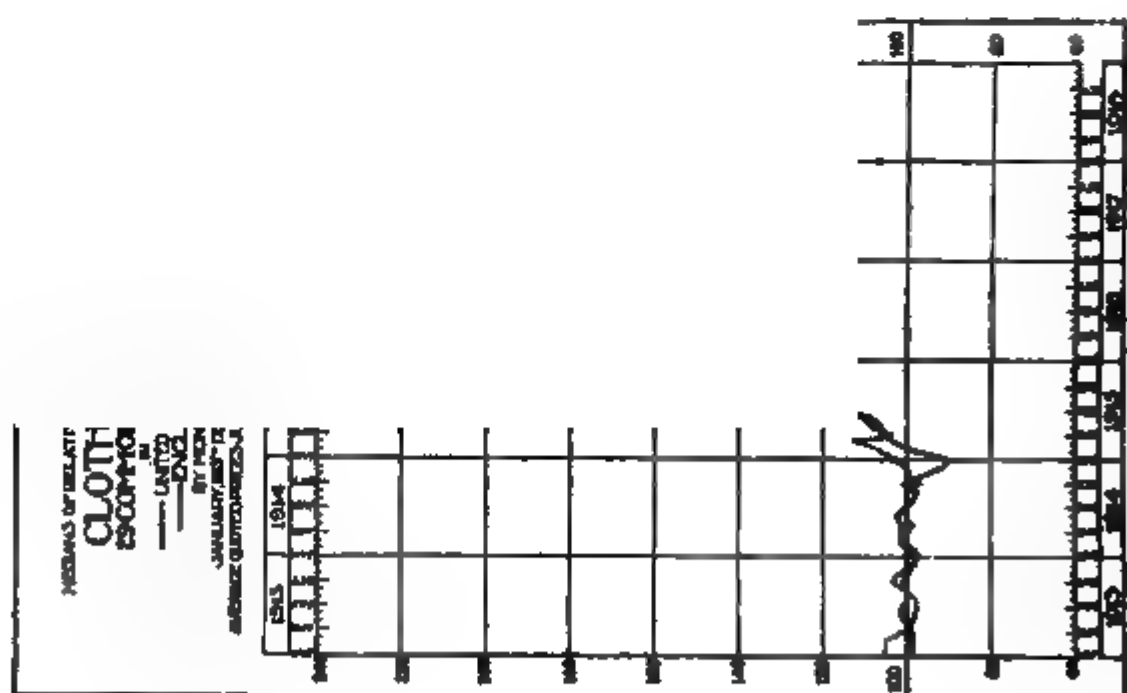
The medians of relative prices of 44 identical commodities in France and the United States, show that French prices rose earlier and much higher than American prices. The American prices of these selected commodities, unlike those of the corresponding prices for France, turned downward early in 1918. The behavior of Canadian and American prices was curiously similar, though Canadian prices rose slightly higher.

Medians of relative prices.
FOOD
34 commodities
— UNITED ST.
— ENGL.
BY MONTHS
JANUARY, 1913=100
AVERAGE QUOTED PRICES JULY

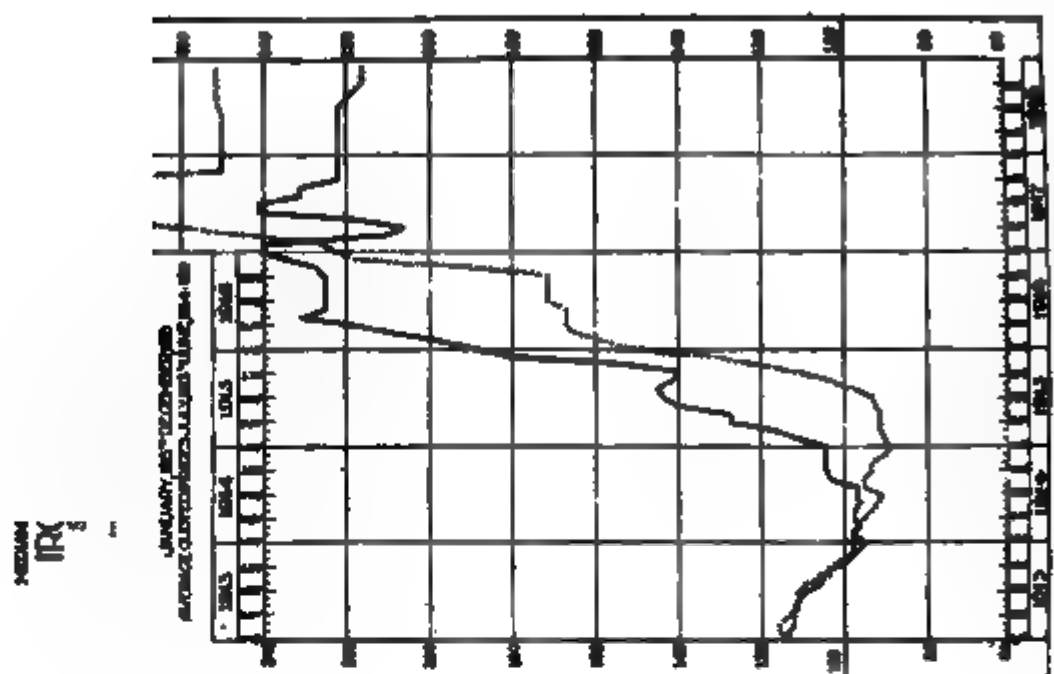


Medians of relative prices.—Food, 34 commodities, in United States and England.—By months, January, 1913, to December, 1913. (Average quoted prices, July, 1913, to June, 1914=100.)

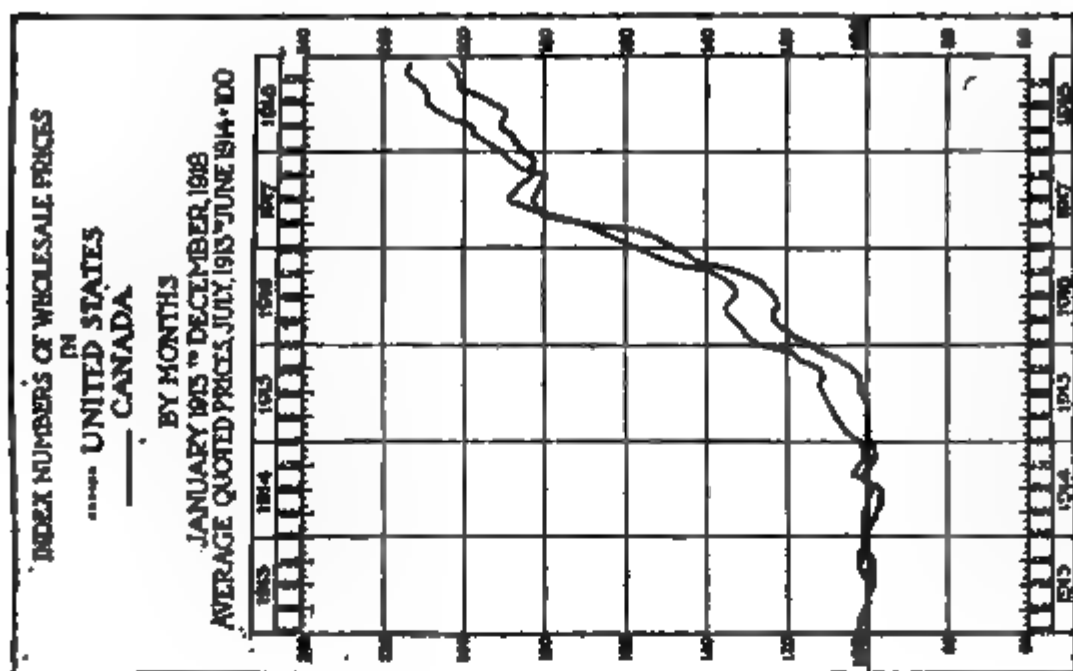
Medians of relative prices.—150 commodities, in United States and England.—By months, January, 1913, to December, 1913. (Average quoted prices, July, 1913, to June, 1914=100.)



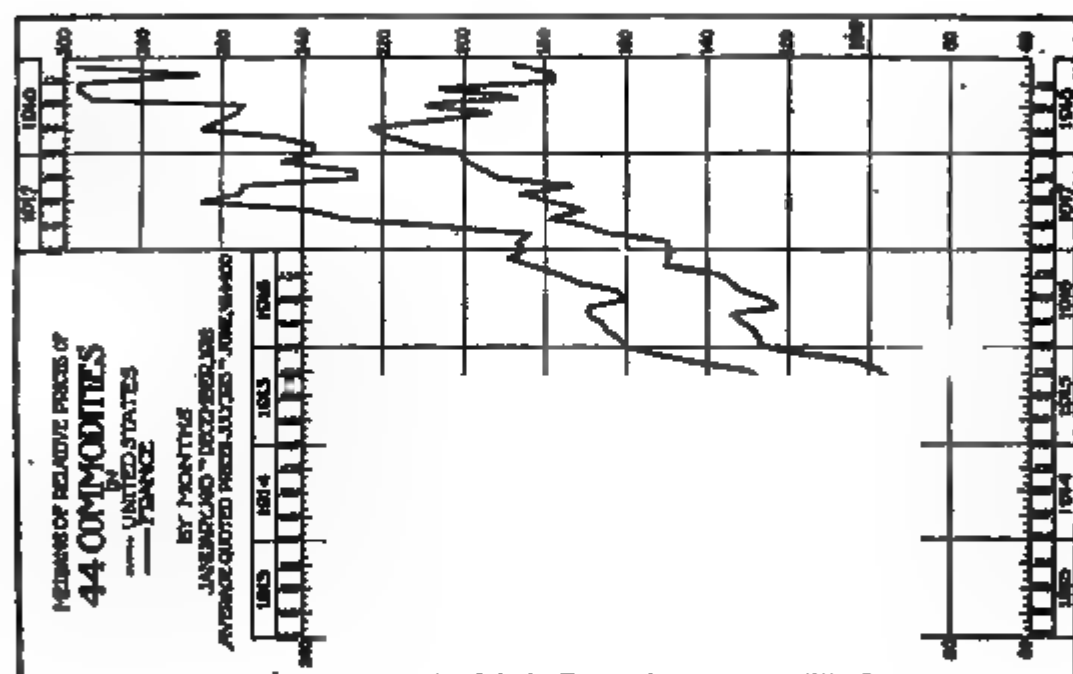
Medians of relative prices.—Clothing, 20 commodities, in United States and England.—By months, January, 1912, to December, 1917. (Average quoted prices, 1912, to June, 1914, 1914-1918.)



Medians of relative prices.—Iron and steel, 9 commodities, in United States and England.—By months, January, 1912, to December, 1917. (Average quoted prices, July, 1912, to June, 1914-1918.)



Index numbers of wholesale prices in United States and Canada.—By months, January, 1913, to December, 1918. (A average quoted prices, July, 1913, to June, 1914=100.)



Mediana of relative prices.—44 commodities, in United States and France.—By months, January, 1913, to December, 1918. (A average quoted prices, July, 1913, to June, 1914=100.)

Mediana of relative prices.—Chemicals, 56 commodities, in United States and England.—By months, January, 1913, to December, 1918. (A average quoted prices, July, 1913, to June, 1914=100.)

A COMPARISON OF INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES,
ENGLAND, FRANCE, AND CANADA.[Medians of relative prices of identical lists of commodities figured by making the price from July 1, 1913,
to June 30, 1914=100.]

Date.	Class and series.									
	All commodities.		Food.		Iron and steel.		Clothing.		Chemicals.	
	(150)		(34)		(9)		(29)		(55)	
	Eng- land.	United States.	Eng- land.	United States.	Eng- land.	United States.	Eng- land.	United States.	Eng- land.	United States.
1913—Months—										
January.....	101	101	102	94	113	114	99	105	100	100
February....	102	101	103	99	113	115	99	105	100	100
March.....	101	101	105	99	112	115	99	105	100	100
April.....	101	101	105	100	112	113	99	102	100	100
May.....	101	100	103	98	112	111	100	99	100	100
June.....	101	100	103	97	111	111	101	99	100	100
July.....	101	100	102	100	109	111	101	98	100	100
August.....	100	101	102	99	105	109	100	98	100	100
September..	101	101	102	101	106	103	100	100	100	100
October.....	101	101	101	101	101	103	101	103	100	100
November..	100	100	100	100	99	100	100	102	100	100
December...	100	100	100	99	98	97	98	99	100	100
Quarters—										
First.....	101	101	103	97	113	115	99	105	100	100
Second.....	101	100	104	98	112	112	100	100	100	100
Third.....	101	101	102	100	107	108	100	99	100	100
Fourth.....	100	100	100	100	99	100	100	101	100	100
Year.....	101	101	102	99	108	109	100	101	100	100
1914—Months—										
January.....	100	99	100	100	98	95	98	97	100	100
February....	100	99	100	100	98	98	98	99	100	100
March.....	100	100	100	100	96	98	101	101	100	100
April.....	99	99	98	98	98	96	101	100	100	100
May.....	99	99	97	99	98	93	101	99	100	100
June.....	99	99	98	98	96	92	102	100	100	100
July.....	98	99	96	98	97	91	100	100	100	100
August.....	100	100	102	102	97	95	99	100	100	100
September..	100	100	105	103	103	95	98	100	100	100
October.....	102	100	103	102	104	93	101	97	119	100
November..	102	100	104	103	104	93	96	100	114	102
December...	105	100	105	101	104	90.	92	100	117	102
Quarters—										
First.....	100	99	100	100	97	97	99	99	100	100
Second.....	99	99	98	98	97	94	101	100	100	100
Third.....	99	100	101	101	99	94	99	100	103	100
Fourth.....	103	100	104	102	104	92	96	99	117	101
Year.....	100	100	101	100	99	94	99	99	105	100
1915—Months—										
January.....	107	100	110	100	104	89	90	103	121	102
February....	111	100	113	103	112	90	99	107	123	103
March.....	117	101	110	104	117	91	103	112	126	103
April.....	119	102	126	100	127	91	106	104	130	111
May.....	124	102	123	99	127	91	106	108	137	112
June.....	131	105	125	97	140	92	108	110	145	113
July.....	130	111	120	99	143	93	116	115	150	127
August.....	133	112	123	101	145	99	117	116	155	131
September..	137	110	127	97	141	103	116	117	158	142
October.....	137	113	128	100	140	110	117	118	168	147
November..	137	116	130	99	152	120	114	119	187	160
December...	147	123	133	102	180	129	114	120	201	167
Quarters—										
First.....	112	100	114	102	111	90	97	107	123	103
Second.....	125	103	125	99	131	91	107	107	137	112
Third.....	133	111	123	99	143	98	116	116	154	133
Fourth.....	140	117	130	100	157	120	115	119	185	153
Year.....	128	108	123	100	136	100	109	112	150	127

A COMPARISON OF INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES, ENGLAND, FRANCE, AND CANADA—Continued.

[Medians of relative prices of identical lists of commodities figured by making the price from July 1, 1913, to June 30, 1914=100.]

Date.	Class and series.									
	All commodities.		Food.		Iron and steel.		Clothing.		Chemicals.	
	(150)		(34)		(9)		(29)		(55)	
	Eng- land.	United States.	Eng- land.	United States.	Eng- land.	United States.	Eng- land.	United States.	Eng- land.	United States.
1916—Months—										
January.....	151	128	139	108	189	147	124	123	204	183
February....	158	132	137	113	198	158	126	126	207	208
March.....	164	139	141	111	210	165	127	132	226	208
April.....	166	145	150	115	219	167	128	134	230	250
May.....	171	146	155	114	231	167	130	136	235	250
June.....	172	145	153	113	225	167	139	141	255	250
July.....	167	144	148	115	225	171	139	142	255	233
August.....	167	149	151	117	225	171	138	142	261	216
September..	173	148	155	123	225	171	148	143	261	200
October.....	177	154	157	124	225	171	153	147	255	190
November..	186	164	158	129	227	188	161	160	264	193
December...	196	176	166	127	234	218	167	175	255	192
Quarters—										
First.....	158	133	139	111	190	157	126	127	212	200
Second.....	170	145	153	114	225	167	132	137	240	250
Third.....	169	147	151	118	225	171	142	142	259	216
Fourth.....	186	165	160	127	229	192	160	161	258	192
Year.....	171	148	151	117	219	172	140	142	242	214
1917—Months—										
January.....	198	181	172	137	240	222	168	179	255	192
February....	198	187	186	146	240	226	168	185	262	192
March.....	206	195	188	149	210	243	170	189	286	205
April.....	206	202	193	165	206	261	175	187	286	235
May.....	214	206	203	178	218	289	184	194	293	240
June.....	216	206	202	169	241	325	190	210	293	235
July.....	214	205	198	157	241	357	196	216	289	229
August.....	211	206	197	155	231	357	200	212	288	239
September..	215	206	197	164	231	349	201	209	289	239
October.....	222	204	194	170	222	289	206	218	296	247
November..	226	207	201	173	222	250	212	240	302	244
December...	237	209	199	187	222	250	230	246	302	237
Quarters—										
First.....	201	188	182	144	230	230	169	184	268	196
Second.....	212	205	199	171	222	292	183	197	291	237
Third.....	213	206	197	159	234	354	199	212	289	236
Fourth.....	228	207	198	177	222	263	213	235	300	243
Year.....	214	202	194	163	227	285	191	207	287	223
1918—Months—										
January.....	238	209	204	182	222	250	236	247	202	240
February....	239	211	204	195	222	250	242	250	314	240
March.....	239	207	203	192	222	250	245	251	312	240
April.....	241	213	220	199	222	250	249	239	312	236
May.....	241	208	216	190	222	250	243	212	326	247
June.....	241	199	225	186	222	250	243	232	326	247
July.....	242	202	226	187	222	251	258	225	326	213
August.....	239	209	232	200	220	251	223	203	307	228
September..	245	209	234	201	218	251	223	203	321	230
October.....	249	210	234	206	216	251	230	203	336	250
November..	245	210	227	209	216	251	205	190	300	251
December...	245	207	231	208	216	251	205	185	283	233
Quarters—										
First.....	239	209	204	190	222	250	241	249	309	240
Second.....	241	207	220	192	222	250	245	228	321	243
Third.....	242	207	231	196	220	251	235	210	318	224
Fourth.....	246	209	231	208	216	251	213	193	306	245
Year.....	242	208	221	196	220	251	234	220	314	238

A COMPARISON OF INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES, ENGLAND, FRANCE, AND CANADA—Continued.

[Medians of relative prices of identical lists of commodities figured by making the price from July 1, 1911, to June 30, 1914—100.]

	All commodities class.			
	Series 44.		Series 270.	
	France.	United States.	Canada.	United States.
1913—Months—				
January.....	102	100	101	100
February.....	102	100	100	102
March.....	101	100	100	102
April.....	102	100	100	101
May.....	102	100	100	100
June.....	102	100	100	100
July.....	100	100	99	100
August.....	102	101	99	101
September.....	102	103	99	102
October.....	101	103	99	102
November.....	100	101	100	102
December.....	100	99	101	101
Quarters—				
First.....	102	100	100	102
Second.....	102	100	100	100
Third.....	101	101	99	101
Fourth.....	100	101	100	102
Year.....	101	101	100	101
1914—Months—				
January.....	100	99	101	100
February.....	100	100	101	100
March.....	100	100	101	99
April.....	98	99	101	98
May.....	100	100	100	97
June.....	100	99	100	97
July.....	100	97	99	97
August.....	98	99	100	101
September.....	98	108	104	101
October.....	99	99	102	98
November.....	99	97	101	98
December.....	104	99	101	98
Quarters—				
First.....	100	100	101	100
Second.....	99	99	100	97
Third.....	99	101	101	100
Fourth.....	101	98	102	98
Year.....	100	100	101	99
1915—Months—				
January.....	105	100	102	100
February.....	106	100	105	100
March.....	113	103	107	100
April.....	111	101	108	100
May.....	107	99	109	100
June.....	106	100	110	100
July.....	114	102	111	102
August.....	118	102	112	102
September.....	127	98	111	102
October.....	130	98	112	104
November.....	141	102	117	107
December.....	153	116	119	111
Quarters—				
First.....	108	101	105	100
Second.....	108	100	109	100
Third.....	120	100	111	102
Fourth.....	141	105	116	107
Year.....	119	102	110	102

A COMPARISON OF INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES,
ENGLAND, FRANCE, AND CANADA—Continued.[Medians of relative prices of identical lists of commodities figured by making the price from July 1, 1913,
to June 30, 1914=100.]

	All commodities class.			
	Series 44.		Series 270.	
	France.	United States.	Canada.	United States.
1916—Months—				
January.....	160	127	127	115
February.....	162	128	130	118
March.....	165	129	131	121
April.....	167	132	133	123
May.....	170	134	135	123
June.....	170	123	135	122
July.....	161	125	133	123
August.....	163	132	133	125
September.....	172	134	135	127
October.....	177	138	139	132
November.....	183	151	148	141
December.....	189	150	153	144
Quarters—				
First.....	162	128	129	118
Second.....	169	130	134	123
Third.....	165	130	134	125
Fourth.....	183	146	146	139
Year.....	170	134	136	126
1917—Months—				
January.....	186	150	157	148
February.....	187	150	162	151
March.....	184	165	166	156
April.....	208	171	170	170
May.....	229	179	180	178
June.....	238	172	182	183
July.....	265	179	183	189
August.....	256	186	182	187
September.....	255	174	181	186
October.....	227	192	180	182
November.....	227	195	186	183
December.....	245	200	189	182
Quarters—				
First.....	186	155	161	152
Second.....	225	174	177	177
Third.....	259	180	182	187
Fourth.....	233	196	185	182
Year.....	226	176	176	175
1918—Months—				
January.....	238	201	191	185
February.....	238	212	194	187
March.....	247	219	198	188
April.....	265	223	198	191
May.....	261	210	203	190
June.....	257	194	207	189
July.....	255	209	209	193
August.....	293	187	209	196
September.....	297	206	210	201
October.....	297	178	213	201
November.....	266	179	214	201
December.....	297	188	213	203
Quarters—				
First.....	241	211	194	187
Second.....	261	209	203	190
Third.....	282	201	209	197
Fourth.....	287	182	213	202
Year.....	268	201	205	194

A COMPARISON OF INDEX NUMBERS OF
ENGLAND, 1713

[Medians of relative prices of 1713]

1713—M

BOOK II

**GOVERNMENT REGULATIONS RELATING
TO PRICES**

1. INTRODUCTION.

The substance of all known formal and informal regulations relating to prices, that were issued by the Government during the war, has been put here into compact form. The regulations compiled and digested make up Book II of the study on "Government Control Over Prices."

The Government issued thousands of regulations during the war relating to production, conservation, curtailment, priority, transportation, and purchase which affected prices indirectly but are not here recorded. This digest does not comprehend other controls than those which pertain strictly to prices. An endeavor has been made even to cut away parts of regulations, where the whole regulation was not relevant to price control.

The body of separate regulations that appear are classified alphabetically, under one or another of the following main commodity groups: Foods; fuels; metals and metal products; textiles and fibers; hides, skins and leather; lumber; building materials; chemicals; rubber; and paper. There remained two alternative methods of arrangement each with its advantages—a classification of regulations under the Government agencies exercising them, and a classification chronologically by the dates of their issue. The former alternative proved not feasible since frequently the same commodity was controlled by various boards at different times. Its advantages, moreover, can be had by reference to the main part of this investigation where the commodity controls are discussed under the boards exercising them at the signing of the armistice. The latter alternative had only a slight advantage to recommend it. It should be noted that, although the regulations are listed alphabetically, it is possible to find quickly the date of each regulation and the Government agent exercising it.

The Government has not heretofore attempted any compilation of war-time regulations over prices, and it is inevitable that this one will present slight omissions. The most serious of these are the many informal agreements pertaining to prices which commodity chiefs made with their industry, and of which no records remain. The Government regulations which are printed here include all that were found in the official sources of price regulation, and many others that were discovered by correspondence and by searching through the files left over from the war.

The compilers have not felt obliged to include all differential prices, which the industry calculated and printed with Government approval. These differentials represent simply prices figured to make various grades of goods sell in scale with the base prices fixed by the Government.

2. FOODS.

The Congress passed the food and fuel control act (Public, No. 41, 65th Cong.) on August 10, 1917, and thereby gave the President power to bring under license control virtually all large dealers in foodstuffs.¹ The President, by a

¹ There follows in full a copy of the provisions of the food and fuel act of Aug. 10, 1917 (Public, No. 41, 65th Cong., H. R. 4961), which relate to food control.

An Act To provide further for the national security and defense by encouraging the production, conserving the supply, and controlling the distribution of food products and fuel.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That by reason of the existence of a state of war, it is essential to the national security and defense, for the successful prosecution of the war, and for the support and maintenance of the Army and Navy, to assure an adequate supply and equitable distribution, and to facilitate the movement, of foods, feeds, fuel including fuel oil and natural gas, and fertilizer and fertilizer ingredients, tools, utensils, implements, machinery, and equipment required for the actual production of foods, feeds, and fuel, hereafter in this Act called necessities; to prevent, locally or generally, scarcity, monopolization, hoarding, injurious speculation, manipulations, and private controls, affecting such supply, distribution, and movement; and to establish and maintain governmental control of such necessities during the war. For such purposes the instrumentalities, means, methods, powers, authorities, duties, obligations, and prohibitions hereinafter set forth are created, established, conferred, and prescribed. The President is authorized to make such regulations and to issue such orders as are essential effectively to carry out the provisions of this Act.

SEC. 2. That in carrying out the purposes of this Act the President is authorized to enter into any voluntary arrangements or agreements, to create and use any agency or agencies, to accept the services of any person without compensation, to cooperate with any agency or person, to utilize any department or agency of the Government, and to coordinate their activities so as to avoid any preventable loss or duplication of efforts or funds.

SEC. 3. That no person acting either as a voluntary or paid agent or employee of the United States in any capacity, including an advisory capacity, shall solicit, induce, or attempt to induce any person or officer authorized to execute or to direct the execution of contracts on behalf of the United States to make any contract or give any order for the furnishing to the United States of work, labor, or services, or of materials, supplies, or other property of any kind or character, if such agent or employee has any pecuniary interest in such contract or order, or if he or any firm of which he is a member, or corporation, joint-stock company, or association of which he is an officer or stockholder, or in the pecuniary profits of which he is directly or indirectly interested, shall be a party thereto. Nor shall any agent or employee make, or permit any committee or other body of which he is a member to make, or participate in making, any recommendation concerning such contract or order to any council, board, or commission of the United States or any member or subordinate thereof, without making to the best of his knowledge and belief a full and complete disclosure in writing to such council, board, commission, or subordinate of any and every pecuniary interest which he may have in such contract or order and of his interest in any firm, corporation, company, or association being a party thereto. Nor shall he participate in the awarding of such contract or giving such order. Any willful violation of any of the provisions of this section shall be punishable by a fine of not more than \$10,000, or by imprisonment of not more than five years, or both: *Provided*, That the provisions of this section shall not change, alter or repeal section forty-one of chapter three hundred and twenty-one, Thirty-fifth Statutes at Large.

SEC. 4. That it is hereby made unlawful for any person willfully to destroy any necessities for the purpose of enhancing the price or restricting the supply thereof; knowingly to commit waste or willfully to permit preventable deterioration of any necessities in or in connection with their production, manufacture, or distribution; to hoard, as defined in section six of this Act, any necessities; to monopolize or attempt to monopolize, either locally or generally, any necessities; to engage in any discriminatory and unfair, or any deceptive or wasteful practice or device, or to make any unjust or unreasonable rate or charge, in handling or dealing in or with any necessities; to conspire, combine, agree, or arrange with any other person, (a) to limit the facilities for transporting, producing, harvesting, manufacturing, supplying, storing, or dealing in any necessities; (b) to restrict the supply of any necessities; (c) to restrict distribution

series of Executive orders and proclamations, put entire responsibility for food control under the United States Food Administrator, Herbert C. Hoover, and extended the list of foods requiring licenses from the Food Administration.¹

¹ There follow the Executive orders and proclamations issued from time to time, and which were the immediate authority from the President for the administration of control:

EXECUTIVE ORDERS.

Providing for organization of the United States Food Administrators, Aug. 10, 1917.

Providing for organization of the Food Administration Grain Corporation, Aug. 14, 1917.

Directing Treasury Department to enforce sections 15 and 16 of food-control act, Sept. 2, 1917.

Providing for appointment of secretaries to Federal Food Administration without civil-service examination, Sept. 27, 1917.

Providing for requisitioning of foods and feeds, Oct. 23, 1917.

Amending civil-service regulations, Nov. 10, 1917.

Authorizing United States Food Administration to find that fair profit is normal average prewar profit, Nov. 27, 1917.

Designating Food Administration Grain Corporation as agency of United States to purchase wheat, and directing that capital stock be increased, June 21, 1918.

Note regarding formation of the United States Sugar Equalization Board (Inc.), formed July 13, 1918.

PROCLAMATIONS.

License of wheat and rye elevators and millers, Aug. 14, 1917.

License of importers, manufacturers, and refiners of sugar, sugar sirups, and molasses, Sept. 7, 1917.

License of manufacturers and distributors of certain food commodities, Oct. 8, 1917.

Licensing bakers, Nov. 7, 1917.

License of arsenic industry, Nov. 15, 1917.

Limiting alcoholic content of malt liquor, Dec. 8, 1917.

License of ammonia industry, Jan. 3, 1918.

Licensing the importation, manufacture, storage, and distribution of feeds and certain other food commodities, Jan. 10, 1918.

Conservation of wheat, Jan. 18, 1918.

Licensing bakers not already licensed, and importers and distributors of green coffee, Jan. 30, 1918.

Fixing guaranteed prices for 1918 wheat crop, Feb. 21, 1918.

License of fertilizer industry, Feb. 25, 1918.

Licensing packers of canned tuna and others, May 14, 1918.

License of farm-equipment industry, May 14, 1918.

License of stockyards, June 18, 1918.

Fixing guaranteed prices for 1919 wheat crop, Sept. 2, 1918.

License of dealers in live or dead cattle, sheep, swine, or goats, Sept. 6, 1918.

Prohibiting manufacture of malt liquors, Sept. 16, 1918.

Licensing operators of warehouses storing foods and feeds for hire, and others, Nov. 2, 1918.

of any necessities; (d) to prevent, limit, or lessen the manufacture or production of any necessities in order to enhance the price thereof, or (e) to exact excessive prices for any necessities; or to aid or abet the doing of any act made unlawful by this section.

SEC. 5. That, from time to time, whenever the President shall find it essential to license the importation, manufacture, storage, mining, or distribution of any necessities, in order to carry into effect any of the purposes of this Act, and shall publicly so announce, no person shall, after a date fixed in the announcement, engage in or carry on any such business specified in the announcement of importation, manufacture, storage, mining, or distribution of any necessities as set forth in such announcement, unless he shall secure and hold a license issued pursuant to this section. The President is authorized to issue such licenses and to prescribe regulations for the issuance of licenses and requirements for systems of accounts and auditing of accounts to be kept by licensees, submission of reports by them, with or without oath or affirmation, and the entry and inspection by the President's duly authorized agents of the places of business of licensees. Whenever the President shall find that any storage charge, commission, profit, or practice of any licensee is unjust, or unreasonable, or discriminatory and unfair, or wasteful, and shall order such licensee, within a reasonable time fixed in the

The whole body of regulations pertaining to foods issued by the Food Administration fall under general license regulations (No. I) or special license regula-

order, to discontinue the same, unless such order, which shall recite the facts found, is revoked or suspended, such licensee shall, within the time prescribed in the order, discontinue such unjust, unreasonable, discriminatory and unfair storage charge, commission, profit, or practice. The President may, in lieu of any such unjust, unreasonable, discriminatory, and unfair storage charge, commission, profit, or practice, find what is a just, reasonable, nondiscriminatory and fair storage charge, commission, profit, or practice, and in any proceeding brought in any court such order of the President shall be prima facie evidence. Any person who, without a license issued pursuant to this section, or whose license shall have been revoked, knowingly engages in or carries on any business for which a license is required under this section, or willfully fails or refuses to discontinue any unjust, unreasonable, discriminatory and unfair storage charge, commission, profit, or practice, in accordance with the requirement of an order issued under this section, or any regulation prescribed under this section, shall, upon conviction thereof, be punished by a fine not exceeding \$5,000, or by imprisonment for not more than two years, or both: *Provided*, That this section shall not apply to any farmer, gardener, cooperative association of farmers or gardeners, including live-stock farmers, or other persons with respect to the products of any farm, garden, or other land owned, leased, or cultivated by him, nor to any retailer with respect to the retail business actually conducted by him, nor to any common carrier, nor shall anything in this section be construed to authorize the fixing or imposition of a duty or tax upon any article imported into or exported from the United States or any State, Territory, or the District of Columbia: *Provided further*, That for the purposes of this Act a retailer shall be deemed to be a person, copartnership, firm, corporation, or association not engaging in the wholesale business whose gross sales do not exceed \$100,000 per annum.

SEC. 6. That any person who willfully hoards any necessities shall upon conviction thereof be fined not exceeding \$5,000 or be imprisoned for not more than two years, or both. Necessaries shall be deemed to be hoarded within the meaning of this Act when either (a) held, contracted for, or arranged for by any person in a quantity in excess of his reasonable requirements for use or consumption by himself and dependents for a reasonable time; (b) held, contracted for, or arranged for by any manufacturer, wholesaler, retailer, or other dealer in a quantity in excess of the reasonable requirements of his business for use or sale by him for a reasonable time, or reasonably required to furnish necessities produced in surplus quantities seasonally throughout the period of scant or no production; or (c) withheld, whether by possession or under any contract or arrangement, from the market by any person for the purpose of unreasonably increasing or diminishing the price: *Provided*, That this section shall not include or relate to transactions on any exchange, board of trade, or similar institution or place of business as described in section thirteen of this Act that may be permitted by the President under the authority conferred upon him by said section thirteen: *Provided, however*, That any accumulating or withholding by any farmer or gardener, cooperative association of farmers or gardeners, including live-stock farmers, or any other person, of the products of any farm, garden, or other land owned, leased, or cultivated by him shall not be deemed to be hoarding within the meaning of this Act.

SEC. 7. That whenever any necessities shall be hoarded as defined in section six they shall be liable to be proceeded against in any district court of the United States within the district where the same are found and seized by a process of libel for condemnation, and if such necessities shall be adjudged to be hoarded they shall be disposed of by sale in such manner as to provide the most equitable distribution thereof as the court may direct, and the proceeds thereof, less the legal costs and charges, shall be paid to the party entitled thereto. The proceedings of such libel cases shall conform as near as may be to the proceedings in admiralty, except that either party may demand trial by jury of any issue of fact joined in any such case, and all such proceedings shall be at the suit of and in the name of the United States. It shall be the duty of the United States attorney for the proper district to institute and prosecute any such action upon presentation to him of satisfactory evidence to sustain the same.

SEC. 8. That any person who willfully destroys any necessities for the purpose of enhancing the price or restricting the supply thereof shall, upon conviction thereof, be fined not exceeding \$5,000 or imprisoned for not more than two years, or both.

SEC. 9. That any person who conspires, combines, agrees, or arranges with any other person (a) to limit the facilities for transporting, producing, manufacturing, supplying, storing, or dealing in any necessities; (b) to restrict the supply of any necessities; (c) to restrict the distribution of any necessities; (d) to prevent, limit, or lessen the manufacture or production of any necessities in order to enhance the price thereof shall, upon

tions (Nos. II to XXVIII).¹ These regulations, issued during the war in mimeographed and printed loose-leaf form, pertain to prices, specifications, contracts,

¹ There follows a list showing dates of the various general and special license regulations issued by the Food Administration:

No. I. General license regulations: Governing all licenses for the importation, manufacture, storage, and distribution of food commodities and feeds.

SPECIAL LICENSE REGULATIONS.

No. II. Wheat millers and manufacturers of mixed flours, effective July 22, 1918.

No. III. A. Elevators and dealers handling wheat, rye, corn, oats, and barley. B. Corn, oats, rye, and barley millers. Effective September 28, 1918.

No. IV. A. Malsters. B. Near-beer manufacturers, effective September 28, 1918.

No. V. A. Special regulations governing dealers in rough rice. B. Special regulations governing rice millers and manufacturers of rice flour, effective July 29, 1918.

No. VI. Manufacturers and refiners of sugar, effective June 15, 1918.

No. VII. Cannery of peas, tomatoes, corn, dried beans, salmon, sardines and tuna, and manufacturers of tomato catsup, tomato soup, and other tomato products, manufacturers of condensed, evaporated, or powdered milk, effective June 15, 1918.

No. VIII. Packers of dried fruits, effective June 15, 1918.

No. IX. Dealers and brokers in cotton seed and peanuts and cotton ginners, crushers of cotton seed, peanuts, soya beans, palm kernel, and copra. Importers of peanuts, peanut oil, soya beans, soya-bean oil, palm kernels, palm-kernel oil, copra, copra oil, and palm oil, and dealers and brokers in such imported products. Refiners of and dealers and brokers in cottonseed oil, peanut oil, soya-bean oil, palm-kernel oil, and copra oil, effective July 1, 1918.

No. X. Special regulations governing manufacture of oleomargarine and other butter substitutes, effective December 4, 1918.

No. XI. Wholesalers, jobbers, importers, retailers: Special rules applying to licensed nonperishable food commodities, effective June 15, 1918.

No. XII. Brokers and auctioneers of licensed nonperishable food commodities, effective June 15, 1918.

No. XIII. Manufacturers of bakery products, effective September 1, 1918.

No. XIV. Dealers in glucose, refiners' sirups, maple sirup, sorghum, cane-juice sirup, centrifugal molasses, open-kettle molasses, West India molasses and blackstrap molasses, and manufacturers and mixers of mixed molasses, effective November 7, 1918.

No. XV. Distributors of fresh fruits and vegetables.

No. XVI. Distributors of fresh fish and frozen fish.

No. XVII. Salt-water fishermen.

No. XVIII. Distributors of poultry, effective December 9, 1918.

No. XIX. Distributors of eggs, effective November 11, 1918.

No. XX. Manufacturers and distributors of butter, effective December 23, 1918.

No. XXI. Manufacturers and distributors of cheese, effective June 12, 1918.

No. XXII. Distributors of milk and cream.

No. XXIII. Meat packers and manufacturers of lard, distributors of fresh meat.

No. XXIV. Cold-storage warehousemen, effective August 26, 1918.

No. XXV. Feeding stuffs, effective August 1, 1918.

No. XXVI. Directions regarding the use of tin and other containers adopted by the United States Food Administration and the War Industries Board applying to manufacturers and packers of baking powder, ground spice, powdered cocoa, chocolate, candy, coffee, coffee substitutes, tea, spaghetti, pickles, hominy, condensed milk, salt, lard, and lard substitutes, macaroni, sirups, and molasses, effective October 1, 1918.

No. XXVII. All public eating places, effective December 17, 1918.

No. XXVIII. Special regulations governing licensees engaged in business as general storage warehousemen, effective December 1, 1918.

conviction thereof, be fined not exceeding \$10,000 or be imprisoned for not more than two years, or both.

Sec. 10. That the President is authorized, from time to time, to requisition foods, feeds, fuels, and other supplies necessary to the support of the Army or the maintenance of the Navy, or any other public use connected with the common defense, and to requisition, or otherwise provide, storage facilities for such supplies; and he shall ascertain and pay a just compensation therefor. If the compensation so determined be not satisfactory to the person entitled to receive the same, such person shall be paid seventy-five per centum of the amount so determined by the President, and shall be

conservation, and distribution. An endeavor has been made in this digest, made

entitled to sue the United States to recover such further sum as, added to said seventy-five per centum will make up such amount as will be just compensation for such necessities or storage space, and jurisdiction is hereby conferred on the United States District Courts to hear and determine all such controversies: *Provided*, That nothing in this section, or in the section that follows, shall be construed to require any natural person to furnish to the Government any necessities held by him and reasonably required for consumption or use by himself and dependents, nor shall any person, firm, corporation, or association be required to furnish to the Government any seed necessary for the seeding of land owned, leased, or cultivated by them.

SEC. 11. That the President is authorized from time to time to purchase, to store, to provide storage facilities for, and to sell for cash at reasonable prices, wheat, flour, meal, beans, and potatoes: *Provided*, That if any minimum price shall have been theretofore fixed, pursuant to the provisions of section fourteen of this Act, then the price paid for any such articles so purchased shall not be less than such minimum price. Any moneys received by the United States from or in connection with the disposal by the United States of necessities under this section may, in the discretion of the President, be used as a revolving fund for further carrying out the purposes of this section. Any balance of such moneys not used as part of such revolving fund shall be covered into the Treasury as miscellaneous receipts.

SEC. 12. That whenever the President shall find it necessary to secure an adequate supply of necessities for the support of the Army or the maintenance of the Navy, or for any other public use connected with the common defense, he is authorized to requisition and take over, for use or operation by the Government, any factory, packing house, oil pipe line, mine, or other plant, or any part thereof, in or through which any necessities are or may be manufactured, produced, prepared, or mined, and to operate the same. Whenever the President shall determine that the further use or operation by the Government of any such factory, mine, or plant, or part thereof, is not essential for the national security or defense, the same shall be restored to the person entitled to the possession thereof. The United States shall make just compensation, to be determined by the President, for the taking over, use, occupation, and operation by the Government of any such factory, mine, or plant, or part thereof. If the compensation so determined be unsatisfactory to the person entitled to receive the same, such person shall be paid seventy-five per centum of the amount so determined by the President, and shall be entitled to sue the United States to recover such further sum as, added to said seventy-five per centum, will make up such amount as will be just compensation, in the manner provided by section twenty-four, paragraph twenty, and section one hundred and forty-five of the Judicial Code. The President is authorized to prescribe such regulations as he may deem essential for carrying out the purposes of this section, including the operation of any such factory, mine, or plant, or part thereof, the purchase, sale, or other disposition of articles used, manufactured, produced, prepared, or mined therein, and the employment, control, and compensation of employees. Any moneys received by the United States from or in connection with the use or operation of any such factory, mine, or plant, or part thereof, may, in the discretion of the President, be used as a revolving fund for the purpose of the continued use or operation of any such factory, mine, or plant, or part thereof, and the accounts of each such factory, mine, plant, or part thereof, shall be kept separate and distinct. Any balance of such moneys not used as part of such revolving fund shall be paid into the Treasury as miscellaneous receipts.

SEC. 13. That whenever the President finds it essential in order to prevent undue enhancement, depression, or fluctuation of prices of, or in order to prevent injurious speculation in, or in order to prevent unjust market manipulation or unfair and misleading market quotations of the prices of necessities, hereafter in this section called evil practices, he is authorized to prescribe such regulations governing, or may either wholly or partly prohibit, operations, practices, and transactions at, on, in, or under the rules of any exchange, board of trade, or similar institution or place of business as he may find essential in order to prevent, correct, or remove such evil practices. Such regulations may require all persons coming within their provisions to keep such records and statements of account, and may require such persons to make such returns, verified under oath or otherwise, as will fully and correctly disclose all transactions at, in, or on, or under the rules of any such exchange, board of trade, or similar institution or place of business, including the making, execution, settlement, and fulfillment thereof. He may also require all persons acting in the capacity of a clearing house, clearing association, or similar institution, for the purpose of clearing, settling, or adjusting transactions at, in, or on, or under the rules of any such exchange, board of trade, or similar institution or place of business, to keep such records and to make such returns as will fully and correctly disclose all facts in their possession relating to such transactions, and he may appoint agents

possible and approved by Mr. W. C. Mullendore, of the legal section of the Food

to conduct the investigations necessary to enforce the provisions of this section and all rules and regulations made by him in pursuance thereof, and may fix and pay the compensation of such agents. Any person who willfully violates any regulation made pursuant to this section, or who knowingly engages in any operation, practice, or transaction prohibited pursuant to this section, or who willfully aids or abets any such violation or any such prohibited operation, practice, or transaction, shall, upon conviction thereof, be punished by a fine not exceeding \$10,000 or by imprisonment for not more than four years, or both.

SEC. 14. That whenever the President shall find that an emergency exists requiring stimulation of the production of wheat and that it is essential that the producers of wheat, produced within the United States, shall have the benefits of the guaranty provided for in this section, he is authorized, from time to time, seasonably and as far in advance of seeding time as practicable, to determine and fix and to give public notice of what, under specified conditions, is a reasonable guaranteed price for wheat, in order to assure such producers a reasonable profit. The President shall thereupon fix such guaranteed price for each of the official grain standards for wheat as established under the United States grain standards Act, approved August eleventh, nineteen hundred and sixteen. The President shall from time to time establish and promulgate such regulations as he shall deem wise in connection with such guaranteed prices, and in particular governing conditions of delivery and payment, and differences in price for the several standard grades in the principal primary markets of the United States, adopting number one northern spring or its equivalent at the principal interior primary markets as the basis. Thereupon, the Government of the United States hereby guarantees every producer of wheat produced within the United States, that, upon compliance by him with the regulations prescribed, he shall receive for any wheat produced in reliance upon this guarantee within the period, not exceeding eighteen months, prescribed in the notice, a price not less than the guaranteed price therefor as fixed pursuant to this section. In such regulations the President shall prescribe the terms and conditions upon which any such producer shall be entitled to the benefits of such guaranty. The guaranteed prices for the several standard grades of wheat for the crop of nineteen hundred and eighteen, shall be based upon number one northern spring or its equivalent at not less than \$2 per bushel at the principal interior primary markets. This guaranty shall not be dependent upon the action of the President under the first part of this section, but is hereby made absolute and shall be binding until May first, nineteen hundred and nineteen. When the President finds that the importation into the United States of any wheat produced outside of the United States materially enhances or is likely materially to enhance the liabilities of the United States under guaranties of prices therefor made pursuant to this section, and ascertains what rate of duty, added to the then existing rate of duty on wheat and to the value of wheat at the time of importation, would be sufficient to bring the price thereof at which imported up to the price fixed therefor pursuant to the foregoing provisions of this section, he shall proclaim such facts, and thereafter there shall be levied, collected, and paid upon wheat when imported in addition to the then existing rate of duty, the rate of duty so ascertained; but in no case shall any such rate of duty be fixed at an amount which will effect a reduction of the rate of duty upon wheat under any then existing tariff law of the United States. For the purpose of making any guaranteed price effective under this section, or whenever he deems it essential in order to protect the Government of the United States against material enhancement of its liabilities arising out of any guaranty under this section, the President is authorized also, in his discretion, to purchase any wheat for which a guaranteed price shall be fixed under this section, and to hold, transport, or store it, or to sell, dispose of, and deliver the same to any citizen of the United States or to any Government engaged in war with any country with which the Government of the United States is or may be at war or to use the same as supplies for any department or agency of the Government of the United States. Any moneys received by the United States from or in connection with the sale or disposal of wheat under this section may, in the discretion of the President, be used as a revolving fund for further carrying out the purposes of this section. Any balance of such moneys not used as part of such revolving fund shall be covered into the Treasury as miscellaneous receipts.

SEC. 15. That from and after thirty days from the date of the approval of this Act no foods, fruits, food materials, or feeds shall be used in the production of distilled spirits for beverage purposes: *Provided*, That under such rules, regulations, and bonds as the President may prescribe, such materials may be used in the production of distilled spirits exclusively for other than beverage purposes, or for the fortification of pure sweet wines as defined by the Act entitled "An Act to increase the revenue, and for other purposes," approved September eighth, nineteen hundred and sixteen. Nor shall there be imported

BOOK II

**GOVERNMENT REGULATIONS RELATING
TO PRICES**

GENERAL REGULATIONS.

The following general rules correspond to general rules, series B, which became effective, unless otherwise noted, on November 1, 1917:

Rule 1. Reports to be furnished.—It shall be the duty of each licensee to give to such representative as may be designated by the United States Food Administrator, whenever the said representative shall so require, any information concerning the conditions and management of the business of the licensee. Reports, when requested by said representative, shall be made on such blanks, to be furnished by the United States Food Administration, as the United States Food Administrator may designate, giving complete information regarding transactions in any commodities imported, manufactured, refined, packed, purchased, contracted for, received, sold, stored, shipped or otherwise handled, distributed or dealt with by the licensee, or on hand, in the possession or under the control of the licensee, and any other information concerning the business of the licensee that such representative may require from time to time. Whenever the said representative shall require it, the licensee shall furnish such information in writing under oath.

Rule 2. Property and records to be open to inspection.—The authorized representative of the United States Food Administrator shall be at full liberty, during ordinary business hours, to inspect any and all property stored or held in possession or under the control of the licensee, and all records of the licensee. All necessary facilities for such inspection shall be extended to the said representative by the licensee, its agents and servants.

Rule 3. Must keep records.—The licensee shall keep such records of his business as shall make practicable the verification of all reports rendered to the United States Food Administration.

NOTE.—Records of "drop shipments" are to be included in the records of the wholesaler as well as of the manufacturer or retailer.

Rule 5. Unreasonable profits prohibited.—The licensee shall not import, manufacture, store, distribute, sell, or otherwise handle any food commodities on an unjust, exorbitant, unreasonable, discriminatory, or unfair commission, profit, or storage charge.

NOTES.—*Special profit regulations.*—In addition to this general rule requiring that profits should be reasonable, the licensee in most lines of business will find special rules dealing more explicitly with the profits permitted in his business.

Licensee performing two functions.—In cases where a licensee, in addition to his principal business, performs another function customarily performed by a different type of licensee, as where a manufacturer distributes through a jobbing department directly to the retail trade, he will be permitted to make a reasonable charge for each service, provided—

(a) That he keeps such separate accounts of his operations as to enable him to make the reports required of persons licensed to perform that function, and to enable such reports to be verified; and

(b) Conforms to the regulations of the Food Administration in respect to the supplementary function which he performs.

In many cases, however, the licensee's service and his expense of operation will not be as great as that of persons engaged exclusively in a similar business, and in such case he will not be allowed to charge as great a margin as is permitted to such other licensee.

Cold-storage warehouse charges.—This rule prohibits cold-storage warehouse licensees from making unreasonable or discriminatory charges in handling or storing food commodities.

The United States Food Administration recognizes the principle that up to a certain point it ordinarily costs less per unit to handle large quantities than to handle small quantities, and large lots than small lots, of a particular commodity, and has no objection to licensees charging a lesser rate per unit for large quantities or lots than for small quantities or lots if the differentiation in rates is based on variation of cost in handling the particular commodity.

Hereafter, the above-mentioned principle must be applied by cold-storage warehousemen in arranging any variations in rates or discounts for quantity contained in schedules of rates or amendments thereto that are filed.

With respect to rate schedules now on file in which lower rates for large lots or discounts for quantity are stated, no objection has been or will be made to differentiations in rates unless they are obviously merely arbitrary or discriminatory or in effect constitute a preference to one or a few patrons, or unless upon investigation they are found to be without reasonable justification.

All rates must of course be contained in the schedule required to be filed with the United States Food Administration and must be clear, explicit, well defined, and intelligible. Every patron is entitled to know his exact classification and the specific rate he is to be charged.

Application of maximum margins of profits to export transactions.—All sales made in the United States are governed by the margins of profit indicated by the Food Administration except sales made by exporters who extend credit abroad or sell on letters of credit and actually ship the goods abroad, provided, however, that where a manufacturer or dealer sells to an exporter for shipment on the exporter's own account, or for shipment as an agent for the buyer, such sales will not be governed by the margins prescribed by the Food Administration for domestic sales if the seller can show that the goods are shipped abroad without any storage or resale in the United States. (Opinion A-125, Dec. 10, 1918.)

Rule 6. Resales within same trade prohibited, when.—The licensee, in selling food commodities, shall keep such commodities moving to the consumer in as direct a line as practicable and without unreasonable delay. Resales within the same trade without reasonable justification, especially if tending to result in a higher market price to the retailer or consumer, will be dealt with as an unfair practice.

NOTE.—*Special resale regulations.*—See pamphlets containing special regulations for application of this rule to particular businesses and commodities.

Dealers in nonperishable commodities will find a full statement explaining what resales are reasonable in their business in the special license regulations applying to them under Rule A-6.

Resales in poultry, eggs, butter, cheese, coffee, and rice are dealt with by special regulation under the rules applying to dealers in those commodities.

In cases of resale, any broker concerned shares the same responsibility as the buyer and seller.

Resales that may be permitted should be made subject to such measure of control as the Federal food administrator in the particular State deems it necessary to exercise. In some States, for example, the administrator has required the parties to a proposed resale to file with him affidavits or other evidence sufficient to establish the fact that the particular lot of goods being resold bears but one wholesale profit between the manufacturer and the retailer. A similar principle applies to resales between retailers.

Rule 7. Speculation prohibited.—No broker or other licensee shall buy or sell any food commodity for his own account unless he is also regularly engaged in and holds himself out to the trade as conducting the business of distributing such commodity otherwise than on a commission or brokerage basis, or unless he uses such commodities in manufacturing, provided that this rule shall not apply to sales on an exchange, board of trade, or similar institution.

Rule 8. Sales to speculators forbidden.—No licensee shall knowingly sell any food commodity to a broker or other licensee who is not buying for personal consumption or engaged in using such commodity in manufacturing, or who is not regularly engaged in and holding himself out to the trade as conducting the business of distributing such commodity otherwise than on a commission or brokerage basis, provided that this rule shall not apply to sales on an exchange, board of trade, or similar institution.

NOTE.—The regulation of exchange transactions is not a function of license regulations, and under section 13 of the food-control act will be handled by special regulation from time to time.

There is no general rule 9 in the present series. See special rules applying to your business.

Rule 10. Unfair practices forbidden.—The licensee shall not buy, contract for, sell, store, or otherwise handle or deal in any food commodities for the purpose of unreasonably increasing the price or restricting the supply of such commodities, or of monopolizing, or attempting to monopolize, either locally or generally, any of such commodities.

Rule 18. Secret rebates prohibited.—No licensee shall make any allowance or payment to the agent or employee of any exchange, association, or other person from whom he buys, or to whom he sells, or for whom he handles commodities on commission without the permission of the principal of such agent. If such permission is not in writing, immediate written notice shall be sent to the principal by the licensee on the account sales or otherwise, giving the amount of the payment and the name of the agent, exchange, or association to whom paid. (Rule issued Nov. 1, 1917, prohibited rebates "without written permission of principal." Amended to present form Apr. 4, 1918; repealed Dec. 16, 1918.)

If general written permission is given by the principal for his agent to receive commissions from a particular broker or other person, written permission or notice is not required in case of each individual commission.

Payments or allowances to an agent of the shipper by a licensee for any services whatever which the agent renders to the licensee are not permissible without the permission of the shipper.

The fact that a broker makes no charge to the owner for forwarding to another locality goods that he can not sell in his own field does not obviate the necessity of obtaining the permission of the owner to the receipt by the broker of an allowance or payment from the new consignee.

Rule 19. Market quotations must not be misleading.—The licensee shall not issue, or make public, market quotations or make any statements to any person regarding the price at which food commodities are being sold, which quotations or statements can not be verified either from his own records or from the records

of other licensees, and shall not make any other misleading statements which tend to enhance the price of any food commodities.

NOTES.—This rule does not make the licensee responsible for distributing market reports published by reputable and established market news agencies bearing the name of the publishers.

It is not necessary to inform a shipper that a quotation is subject to a charge for brokerage if it is the general understanding of the trade that such a quotation is subject to such a charge.

Rule 23 (as amended Dec. 3, 1918). Combination sales prohibited.—No licensee dealing in food commodities at retail shall make or offer to make any combination sales of any food commodity.

A combination sale is (1) any sale or delivery of two or more commodities, or of two or more kinds or sizes of the same commodity, at a price effective only if they are bought at the same time; or (2) any sale or delivery of a commodity upon condition that the purchaser shall buy some other commodity, or some other kind or size of the same commodity. (Rule issued Jan. 28, 1918, permitted sales of sugar with corn meal, and wheat flour with substitutes. Changed Sept. 1, 1918, permitting only combination sales of wheat flour with substitutes. Dec. 3, 1918, all combination sales prohibited; repealed Feb. 1, 1919.)

SPECIAL REGULATIONS.

II. WHEAT MILLERS AND MANUFACTURERS OF MIXED FLOURS.

PROFITS, PRICES, AND DIFFERENTIALS.

Rule M. S. 11 (as amended Sept. 20, 1918). Wheat flour, mixed flour, and feed to be sold at reasonable advance over cost of wheat and packages.—The wheat miller shall sell flour and feed at not more than a reasonable advance over the average purchase price of the wheat from which it is manufactured, plus the cost of packages; provided that if any such miller pays more for wheat than the customary market price in that locality, as evidenced by the fair guaranteed price basis established by the President's proclamation of February 21, 1918, he shall not be permitted to include in his average purchase price, for the purpose of this rule, the excess over such customary market price. (Rule issued Nov. 1, 1917, allowed a profit of 25 cents per barrel on flour and 50 cents per ton on feed. Dec. 25, 1917, differentials on various wheat mill feeds indicated. May 2, 1918, differentials changed on wheat mill feed. Changed to present form July 22, 1918; repealed Dec. 19, 1918.)

NOTE.—Fair price schedules.—The United States Food Administration will publish from time to time and furnish to any wheat miller a maximum fair price schedule for flour and feed established with relation to the guaranteed price basis for wheat. Any sales of wheat flour, mixed flour, whole wheat or graham flour, or wheat mill feed in excess of this fair price schedule will be regarded as a violation of the above rule, and any sale at a price at or below the fair price schedule will be regarded as a compliance with the above rule.

Mixed flours.—The above rule and fair price schedule apply to "mixed flour" and whole wheat and graham flour, as well as to wheat flour. Sales of mixed flour, whole wheat and graham flour will be considered to return an excessive profit if made at a price in excess of the fair price schedule or of the licensee's current selling price of wheat flour.

Soft wheat feeds.—The Food Administration will regard as reasonable the sale of soft winter wheat mill feeds at a price not more than \$2 in excess of the maximum fair price schedule for other wheat mill feeds; provided that all shipments or deliveries of such mill feeds are made in packages which are plainly marked "soft winter wheat."

Interest on arrival drafts.—Interest on arrival drafts on sales of flour and feed may be included in invoices as a separate item, and is chargeable over the fair price schedules where definite arrangements to that effect are made between buyer and seller.

Self-rising wheat flour.—The Food Administration will regard as reasonable the sale of self-rising wheat flour at a price not more than 50 cents per barrel over the licensee's maximum fair price schedule for 100 per cent straight grade wheat flour.

Blenders.—The Food Administration will regard as reasonable a margin of 25 cents per barrel over average cost for blending wheat flours or for blending wheat flours with substitutes, the cost to be considered as the average invoice price delivered at the blending plant. To the above carload basis it will be considered reasonable that blenders add the selling margins covering various classes of sales, as per rule M. S. 14.

Wheat screenings.—Any sales of wheat screenings in excess of the fair price schedule for bran will be regarded as a violation of rule M. S. 11 and cause for revoking the offender's license. (Aug. 24, 1918; canceled Dec. 3, 1918.)

Rule M. S. 12. Package charge.—In arriving at the per barrel package cost for the purpose of rule 11 the licensee shall use the current cost of two 98-pound cotton sacks of standard size and grade as quoted for lots of 1,000 bags, plus any freight or transportation charges. The charge for any other size or style of packages as furnished by mill or buyer shall be calculated on the basis of such 98-pound cotton sacks, plus or minus the differential which will be indicated from time to time by the United States Food Administration. (Differentials for various sizes and kinds of wheat flour packages indicated Dec. 25, 1917; differentials changed Mar. 23, 1918; changed to present form July 22, 1918; repealed Dec. 19, 1918.)

Rule M. S. 13.—Flour price schedule and differentials should be displayed in mill. The wheat miller shall cause to be displayed in his principal place of business and mills, warehouses, and agencies maintained, controlled, or operated by him such flour price schedule and package differentials as may be furnished to him from time to time by the United States Food Administration, and a schedule showing cost of sacks and other charges. He shall furnish copies of any such documents to buyers upon request. (Issued July 22, 1918; repealed Dec. 19, 1918.)

PACKAGE DIFFERENTIALS.

[Basis, 98 pounds cotton.]

Weight.	Kind.	Charge over bulk price for packing in buyer's packages.
196, wood	\$0.60 over basis	\$0.05
98, wood	\$1.35 over basis	.15
98, cotton	Basis (2 to barrel)	.05
140, jute	Same as basis	.05
98, jute	\$0.05 over basis (2 to barrel)	.05
98, cotton	\$0.20 under basis (2 to barrel)	.05
49, cotton	\$0.20 over basis (4 to barrel)	.10
48, cotton	Same as basis	.10
24, cotton	\$0.45 over basis (8 to barrel)	.10
24, cotton	\$0.25 over basis (8 to barrel)	.10
12, cotton	\$0.80 over basis (16 to barrel)	.15
12, cotton	\$0.60 over basis (16 to barrel)	.15
10, cotton	\$1.20 over basis (20 to barrel)	.15
8, cotton	\$0.90 over basis (24 to barrel)	.20
7, cotton	\$1.10 over basis (28 to barrel)	.25
6, cotton	\$1.05 over basis (32 to barrel)	.25
5, cotton	\$1.70 over basis (40 to barrel)	.35
2, cotton	\$1.55 over basis (56 to barrel)	.35
3, cotton	\$1.70 over basis (64 to barrel)	.35
2, cotton	\$2.65 over basis (96 to barrel)	.50
40, paper	\$0.05 under basis (4 to barrel)	.10
48, paper	\$0.25 under basis (4 to barrel)	.10
24, paper	\$0.05 over basis (8 to barrel)	.12
24, paper	\$0.05 under basis (8 to barrel)	.12
12, paper	\$0.25 over basis (16 to barrel)	.18
12, paper	\$0.05 over basis (16 to barrel)	.18
10, paper	\$0.50 over basis (20 to barrel)	.20
8, paper	\$0.15 over basis (24 to barrel)	.25
7, paper	\$0.40 over basis (28 to barrel)	.30
6, paper	\$0.55 over basis (32 to barrel)	.30
5, paper	\$0.70 over basis (40 to barrel)	.45
2, paper	\$0.85 over basis (56 to barrel)	.45
3, paper	\$0.95 over basis (64 to barrel)	.45
2, paper	\$1.60 over basis (96 to barrel)	.75

Outside jute or cotton envelopes, \$0.60 per barrel additional, 10 cents.
 Outside paper envelopes, \$0.40 per barrel additional, 10 cents.
 All sales to be made basis 98-pound cotton.
 Where flour is sold on basis 98-pound cotton sacks and delivery is made in buyer's sacks, the invoice price shall be arrived at by deducting from the selling price the current cost of two 98-pound cotton sacks. To bulk price thus obtained shall be added charges over bulk price for packing flour in buyer's sacks as named above.
 Seller or buyer may not have option of shipping flour in cotton or jute sacks where either have been specified at time of sale, except as may be agreed to by buyer and seller at time of shipment. (Note to rule 12, effective Sept. 18, 1918.)

Rule M. S. 14 (as amended Sept. 20, 1918). Maximum permissible margins over car-lot bulk on various classes of sales.—All sales of wheat flour and wheat mill feed shall be classified as follows, and the wheat miller shall not charge

more than the maximum margins indicated for each class over his car-lot price, bulk, mill, cash, or draft terms:

Class A. Sales to any buyer in carload lots, bulk, mill, cash, or draft attached to bill of lading. Basis.

Class B. Sales to any buyer in mixed carloads of wheat flour, wheat-flour substitutes, and feeds: Flour, not more than 25 cents per barrel over basis. Feed, not more than 50 cents per ton over basis.

Class C. Sales of "consigned" flour to wholesale dealers from cars or docks, in carload lots (not delivered), 25 cents per barrel over basis.

Class D. Sales of "consigned" flour to wholesale dealers, from cars or docks; in less than carload lots (not delivered), 35 cents per barrel over basis.

Class E. Sales of flour to any buyer, other than individual consumer, less than carload lots (not delivered) and excepting sales as per Schedules "C" and "D," not more than 50 cents per barrel over basis.

Class F. Sales of flour in less than carload lots to individual consumers (not including bakers or public-eating places): Not more than \$1.20 per barrel over basis.

Class G. Sales of feed to wholesale dealers in less than carload lots and not less than 1 ton: Not more than \$1 per ton over basis.

Class H. Sales of feed to retail dealers in less than carload lots and not less than 1 ton: Not more than \$2 per ton over basis.

Class I. Sales of feed in less than ton lots to feed dealers: Not more than \$3 per ton over basis.

Sales of feed to consumers.—Sales of feed to consumers must be made at not more than a reasonable margin over basis. The Federal food administrator of the State where the mill is located will indicate what margins will be considered reasonable.

NOTES.—*Credit and delivery on flour.*—Not more than 25 cents per barrel for delivery and credit may be charged in addition to the above margins where flour is delivered to the buyer's door, including all charges for credit, if credit is extended. Where credit is extended without delivery, only the actual interest may be added.

Brokerage.—Brokerage may not be added to the fair price schedule either on flour or feed.

Credit and delivery charges on feed.—Not more than a reasonable cartage or trucking charge may be made where mill feed is delivered to the buyer's door. Where credit is extended only the actual interest may be added.

Cartage.—No charge for cartage or trucking on flour or feed to a station or dock at the town where the mill is located may be made.

Only one margin over basis permitted.—Not more than one of the margins over basis, as indicated above, shall be added by the wheat miller on the sale of any lot of flour or feed.

Rule M. S. 15. Permissible price differential for farina, purified middlings, semolina, or special granular macaroni flour.—Wheat-flour millers manufacturing farina, purified middlings, semolina, or special granular macaroni flour, under the special permission of the United States Food Administration, flour milling section, Washington, D. C., may charge a price for such products not to exceed 40 cents per barrel above the licensee's fair price of 100 per cent straight-grade flour on date of sale. (Issued July 22, 1918; repealed Dec. 19, 1918.)

Rule M. S. 16. Price differential on table bran.—Bran intended for human consumption, so-called table bran, may be sold at a reasonable advance over the licensee's fair price for bran. (Issued July 22, 1918; repealed Dec. 19, 1918.)

Rule M. S. 17. Differentials and returns on wheat mill feed.—In selling wheat mill feed to the consumer at the mill door, if the purchaser desires to buy wheat mill feed in bulk and the sacks are emptied and left at the mill in undamaged condition, the miller shall not add to the purchase price any charge for sacks. In selling various grades of wheat mill feeds in carload lots, on terms of cash or draft attached to bill of lading, the miller shall sell same at a price not in excess of his car-lot price for mixed feed, bulk mill, plus or minus the following differentials:

Shorts, standard middlings, gray shorts, gray middlings, flour middlings, or red dog, with or without screenings, 75 cents per ton over basis. Bran, with or without screenings, \$1.25 per ton under basis.

NOTE.—The wheat miller may make such separations of wheat mill feeds as his trade may demand, but if the total returns received by him from the sale of wheat mill feed manufactured from any given wheat exceeds the amount which the Food Administration considers to return a reasonable profit on an equal quantity of wheat mixed feed, i. e., the entire mill run of wheat mill feed, it will be considered that the miller has violated rule M. S. 11.

Rule M. S. 19. Differential for reconditioning and blending.—The licensee who blends or reconditions flour not of his own manufacture shall not sell such flour

in carload lots at more than 25 cents per barrel over the purchase price; provided that in making sales of the character of those described in rule 14 under classes B, C, D, E, and F, he may add not to exceed the additional margins prescribed therein for such sales. (Issued July 22, 1918; repealed Dec. 19, 1918.)

NOTE.—This rule does not apply to wheat millers mixing their own wheat flour with purchased wheat or substitute flours. Such mixed flour must be sold at not more than the licensee's price for wheat flour, in accordance with rule M. S. 11.

Rule M. S. 20 (as amended Sept. 20, 1918). Custom and exchange grinding.—The wheat miller who receives wheat from farmers' wagons and grinds such wheat on a toll basis, or exchanges such wheat for flour and feed, shall charge not to exceed 35 cents per bushel for each 60 pounds of cleaned wheat so received, and on such basis he shall return to the farmer flour and feed in accordance with the following schedule:

Test weight of of wheat per bushel.	Number pounds flour returnable.	Number pounds hard-wheat feed returnable.	Number pounds soft-wheat feed returnable.
<i>Pounds.</i>			
¹ 58	44	15	14
57	43½	15½	14½
56	42½	16½	15½
55	42	17	16
54	41½	17½	16½
53	40½	18½	17½
52	39½	19½	18½
51	39	20	19

¹ Or heavier.

(Rules issued Mar. 20, 1918, limited farmer to 30 days' supply, and if sold without substitutes a certificate was required restricting him to 30 days' supply to be used only for human consumption by his own household. Changed as noted here July 22, except that millers were not required to do custom and exchange grinding. Sept. 20, 1918, millers were required to continue such grinding, as noted here. Repealed Dec. 3, 1918.)

CONTRACTING AND SHIPPING.

Rule M. S. 21 (as amended Sept. 20, 1918). Uniform contract prescribed.—The wheat miller shall not sell any wheat or mixed flour in quantities of more than 50 barrels, or wheat mill feed in quantities of more than 5 tons, except by signed contract in the form prescribed below. He shall not contract to sell wheat flour, mixed flour, or wheat mill feed in any quantities without stipulating that the terms of the uniform Food Administration contract shall prevail. He shall fill out in every such contract covering flour the flour charge items appearing under "Method of calculating maximum delivered fair price," and in every such contract covering feed the feed charge items appearing thereunder, and shall print under the item "Reasonable price schedule" the figures furnished to the miller by the United States Food Administration for that purpose.

NOTE.—This rule requires the confirmation by written contract of every telegraphic or other order for flour of more than 50 barrels or more or feed of more than 5 tons, even though by reason of shortage in time the flour is shipped before the actual signing of the contract. Until such contract is signed it shall be understood that the transaction is subject to the terms and conditions of the United States Food Administration contract.

Orders taken by salesmen may be taken on regular mill contract forms, which may not show all details as listed in rule M. S. 21, but in such case the memoranda forms must bear notation as follows: "This order is taken subject to conditions of the uniform contract prescribed by the United States Food Administration, and buyer and seller hereby agree to execute such contract in writing on the United States Food Administration contract forms and with all prescribed details shown."

Millers who have had their contract and invoice forms printed in accordance with the regulations issued on July 22, 1918, may use such contracts and invoices until exhausted, conforming in their charges to the minor changes now made. (Rule of Nov. 1, 1917, provided contract for sales of 25 barrels or more of wheat or rye. July 22, 1918, same provision added for sales of 5 tons or more of wheat mill feed. Mixed flour added and changed to 50 barrels as noted here, Dec. 19, 1918.)

CONTRACT FORM PRESCRIBED BY RULE 21.

Contract No. _____ Date _____

_____ of _____ sell(s), and _____

_____ of _____ buy(s), the

following commodities, on the terms and conditions stated below :

Time of {shipment } _____

{delivery }

Destination _____

Routing _____

Terms of payment _____ Draft, through _____

_____ Bank of _____

Prices named in this contract are based on (a) effective price schedule, (b) "class of sale," (c) freight charge, and (d) package charge, as specified below :

Number packages.	Size.	Kind.	Brand.	Bulk price f. o. b. mill.	Delivered price in packages.

METHOD OF CALCULATING MAXIMUM DELIVERED FAIR PRICE.
[Flour in 98-pound cotton sacks.]

	Flour per barrel.	Feed per ton.
(a) Maximum fair price bulk mill as per schedule No. —		
(b) Maximum differential, if any, on sale of class —		
(c) Freight charge (including freight tax)		
(d) Cost of sacks (98-pound cotton for flour)		
Total		

(The schedules, note, and detailed terms and conditions below may be placed on reverse of contract form if desired.)

MAXIMUM PERMISSIBLE MARGINS OVER BASIS ON VARIOUS CLASSES OF SALES.

Class of sale.	Millsale to—	How sold.	Flour, per barrel.	Feed, per ton.
A.....	Anyone.....	Carload lots, bulk mill, cash or draft attached to B/L.	None.	None.
B.....	Anyone.....	Mixed carloads of wheat flour, mixed flour, wheat flour substitutes and feeds.	\$0. 25	\$0. 50
C.....	Wholesale dealers.....	From cars or docks, car lots (not delivered) where flour has been forwarded "on consignment."	. 25	.....
D.....	Wholesale dealers.....	From cars or docks, less than carload (not delivered) where flour has been forwarded "on consignment."	. 35	.....
E.....	Anyone other than consumer.	Less carloads (except class C or D sales) (not delivered).	. 50	.....
F.....	Individual consumers (except bakers and public eating places).	Less carloads	1. 20	.....
G.....	Wholesale feed dealers.....	Less carloads and 2,000 pounds or over	.....	1. 00
H.....	Retail feed dealers.....	Less carloads and 2,000 pounds or over	.....	2. 00
I.....	All feed dealers.....	Less than 1 ton	.....	3. 00

Credit and delivery on flour.—Not more than 25 cents per barrel may be charged in addition to the above margins where flour is delivered to the buyer's door, including all charges for credit, if credit is extended. Where credit is extended without delivery only the actual interest may be added.

Brokerage.—Brokerage may not be added to the fair-price schedule either on flour or feed.

Credit and delivery on feed.—Not more than a reasonable cartage or trucking charge may be made where mill feed is delivered to the buyer's door. Where credit is extended only the actual interest may be added.

Cartage.—No charge for cartage or trucking on flour or feed to a station or dock at the town where the mill is located may be made.

Sales of feed to consumers must be made at not more than a reasonable margin over basis. The Federal food administrator of the State where the mill or warehouse is located will indicate what margin will be considered reasonable.

Only one margin over carload basis permitted.—Not more than one of the margins over carload basis, as indicated above, shall be added by the wheat miller on the sale of any lot of flour or feed.

TERMS AND CONDITIONS.

It is understood and agreed—

(1) **Food Administration regulations.**—That the buyer and seller shall conform to all regulations promulgated by the United States Food Administration.

(2) **Net weights.**—That the wheat flour and wheat mill feed covered by this contract is sold on the basis of net weights when packed, and the determining factor as to weight shall be a moisture content not in excess of Government allowance.

(3) **Contract not subject to change.**—That there are no conditions, representations, or warrants, oral or otherwise, and that there shall be no assignment or cancellation of this contract except as herein stated, and that no agent or representative has authority to modify the printed terms of this contract.

(4) **Shipments within 60 days.**—That the above order shall be shipped or delivered as specified within 60 days from the time that the order is confirmed by the seller unless a shorter time is expressly provided.

(5) **Routing.**—That the seller shall have the right to route all shipments unless otherwise stated in this contract.

(6) **Nonextension of time.**—That there shall be no extension of the time of shipments or delivery under this contract except as herein specified.

(7) **Buyer's nonfulfillment of contract.**—That if the buyer shall fail to file with the seller within 30 days of the date of confirmation of this contract shipping instructions permitting the seller to ship at his option within the remaining period of the contract, then the seller may cancel this contract and the buyer shall pay to the seller an entry charge of 25 cents per barrel on flour and 50 cents per ton on feed, plus or minus the market difference, provided that if such shipping instructions are received before the expiration of 60 days from the date of confirmation of this contract, and prior to any cancellation being sent, the seller's right to cancel shall cease. If the buyer shall refuse to accept any shipment or delivery as specified hereunder or fail to perform any of the other terms of this agreement, then the seller may cancel this contract, and the buyer shall pay to the seller the entry charge above provided, plus or minus the market difference. In addition thereto the seller may pursue such further remedies as the law may provide.

(8) **Seller's nonfulfillment of contract.**—That if the seller shall fail except for the reasons specified in paragraph 9 of this contract to make any shipment or delivery as specified, then the buyer may, at his option, cancel this contract at any time before actual shipment, and the seller shall pay to the buyer the sum of 25 cents per barrel on flour and 50 cents per ton on feed, plus or minus the market difference. The buyer may pursue such further remedies as the law may provide.

(9) **Exceptions to seller's responsibilities.**—That if this contract can not be performed by the seller within the time specified, because of Government contracts not in contemplation at the time of the contract, or because of fires, strikes, labor difficulties, acts of carriers, or other causes beyond the control of the seller, and if the seller notifies the buyer of such inability, stating the specific cause, as soon as he knows that such inability will prevent performance, and in any event on or before the date of shipment or delivery, the seller shall not be responsible for failure to perform. In such event the buyer shall have the option of canceling the contract at the market difference, provided he exercises such option within 24 hours from the time when he receives notice of the seller's inability to perform. If such option is not exercised, the contract time of shipment or delivery shall be extended until a reasonable time after the termination of seller's inability is removed, but not to exceed 30 days beyond the original date of shipment or delivery. At the end of such additional 30 days' period the buyer shall again have the right to cancel as above provided, or the contract shall be similarly extended.

(10) **Buyer's responsibility for final payment.**—That where buyer specifies the bank through which draft is to be presented and to whom payment is to be made by the buyer, the buyer shall be responsible for final payment to the seller.

(11) **Package differentials.**—That both buyer and seller agree to the shipment or delivery of commodities named in this contract on the basis of the package differentials in effect at date of sale as promulgated by the United States Food Administration.

Seller.

By -----

Buyer.

By -----

Rule M. S. 22. Uniform invoice prescribed.—The wheat miller shall invoice all wheat flour and wheat mill feed, except sales to individual consumers, and except sales of 15 barrels or less of flour and 3 tons or less of mill feed, on an invoice form on the front or back of which shall be printed all information shown in this rule and in the form prescribed, the schedule of "reasonable prices" to be in accordance with schedule which will be furnished any miller. He shall fill out in every such invoice covering flour, the flour charge items appearing under "Method of calculating invoice price," and in every invoice covering feed the feed charge items under such heading.

The following items shall appear on front or back of every invoice:

REASONABLE PRICE SCHEDULE (BULK MILL).

Schedule No.	Flour.	Bran.	Wheat mixed feeds.	Middlings, shorts, red-dog.
	(Here insert figures furnished you by Food Administration.)			

Soft wheat feeds.—The Food Administration will regard as reasonable the sale of wheat mill feeds containing not less than 90 per cent soft winter wheat at a price not more than \$2 in excess of the maximum fair-price schedule for other wheat mill feeds; provided that all shipments or deliveries of such mill feeds are made in packages which are plainly marked "Manufactured from soft winter wheat."

NOTE.—The schedule of prices indicated above is based upon a determined wheat value as indicated by the Government reasonable price guarantee and a maximum permissible miller's charge. Any price in excess of that based on the schedules printed in this contract should be reported to the Federal food administrator for your State. (Issued July 22, 1918; repealed Dec. 19, 1918.)

MAXIMUM PERMISSIBLE MARGINS OVER BASIS ON VARIOUS CLASSES OF SALES.

Class of sale.	Mill sale to—	How sold.	Flour per barrel.	Feed per ton.
A.....	Anyone.....	Carload lots, bulk mill, cash or draft attached to B/L.	None.	None.
B.....	Anyone.....	Mixed carloads of wheat flour, mixed flour, wheat-flour substitutes, and feeds.	\$0.25	\$0.30
C.....	Wholesale dealers.....	From cars or docks, car lots (not delivered), where flour has been forwarded "on consignment."	.25	.....
D.....	Wholesale dealers.....	From cars or docks, less than carload (not delivered), where flour has been forwarded "on consignment."	.35	.....
E.....	Anyone other than consumer.	Less carloads (except class C or D sales) (not delivered).	.50	.....
F.....	Individual consumers (except bakers and public eating places).	Less carloads	1.20	.....
G.....	Wholesale feed dealers.....	Less carloads and 2,000 pounds or over	.....	1.00
H.....	Retail feed dealers.....	Less carloads and 2,000 pounds or over	.....	2.00
I.....	All feed dealers.....	Less than 1 ton	.....	3.00

Sales of feed to consumers must be made at not more than a reasonable margin over basis. The Federal food administrator of the State where the mill or warehouse is located will indicate what margin will be considered reasonable.

Only one margin over carload basis permitted.—Not more than one of the margins over carload basis, as indicated above, shall be added by the wheat miller on the sale of any lot of flour or feed.

Credit and delivery on flour.—Not more than 25 cents per barrel may be charged in addition to the above margins where flour is delivered to the buyer's door, including all charges for credit if credit is extended. Where credit is extended without delivery only the actual interest may be added.

Brokerage.—Brokerage may not be added to the fair price schedule either on flour or feed.

Credit and delivery charges on feed.—Not more than a reasonable cartage or trucking charge may be made where mill feed is delivered to the buyer's door. Where credit is extended only the actual interest may be added.

Cartage.—No charge for cartage or trucking on flour or feed to a station or dock at the town where the mill is located may be made.

METHOD OF CALCULATING MAXIMUM FAIR INVOICE PRICE.

[Flour, basis 98-pound cotton sacks.]

	Flour per barrel.	Feed, per ton.
(a) Maximum fair price bulk mill as per Schedule No. —		
(b) Maximum differential, if any, on sale of class —		
(c) Freight charge (including freight tax).....		
(d) Cost of sacks (98-pound cotton for flour).....		
Total.....		

Millers who have had their contract and invoice forms printed in accordance with the regulations issued on July 22, 1918, may use such contracts and invoices until exhausted, conforming in their charges to the minor changes now made.

Rule M. S. 23. Change in destination or point of shipment.—The wheat miller, in invoicing where change in destination is made at the request of the buyer and such change results in a freight rate other than that specified in the original contract, shall charge to the buyer any additional freight charge over, and credit to the buyer any lesser freight charge under, that specified in the contract. If the wheat miller makes a change in point of shipment from that originally named in the contract, such change of point of shipment shall not result in change of delivered cost to buyer. In such case the bulk mill price and freight charge shown on the invoice must be identical with similar prices and charges shown in the original contract. (Issued July 22, 1918; repealed Dec. 19, 1918.)

Rule M. S. 30 (as amended Nov. 12, 1918). Contracts must provide for delivery in 60 days.—The wheat miller shall not make any contract for the sale or delivery of wheat flour, mixed flour, or wheat mill feed for shipment or delivery more than 60 days after the making of such contract, provided that this rule shall not apply to contracts with the Federal, State, county, or municipal Governments or with the Government of any nation at war with Germany. (Rule of Sept. 1, 1917, limited contracts for wheat flour to 30 days. Changed Sept. 1, 1918, to 30 days' supply of wheat flour or mixed flour. Changed Sept. 20, 1918, to include wheat mill feed. Changed to 60 days as noted here Nov. 12, 1918; repealed Dec. 19, 1918.)

III. WHEAT, CORN, OATS, RYE, AND BARLEY.

A. SPECIAL LICENSE REGULATIONS GOVERNING OPERATORS OF ELEVATORS WAREHOUSES, OR OTHER PLACES FOR THE STORAGE OF WHEAT, RYE, CORN, OATS, AND BARLEY, AND DEALERS IN WHEAT, RYE, CORN, OATS, AND BARLEY.

- Rules 1 to 3 relate to storage only.
- Rules 4 to 8 relate to dealings in wheat only.
- Rules 9 to 13 relate to dealings in corn, oats, barley, and rye.

Rule 9. Grain to be sold at reasonable advance over cost, hedging considered.—The licensee shall sell corn, oats, rye, and barley at not more than a reasonable advance over the average cost of the stock of such commodity on hand or under the control of the licensee not at that time contracted to be sold. In arriving at the cost thereof he shall take into consideration the gain or loss from any hedging transaction on any recognized grain exchange. (Issued Jan. 28, 1918.)

B. SPECIAL LICENSE REGULATIONS GOVERNING LICENSEES ENGAGED IN THE BUSINESS OF MANUFACTURING CORN, OATS, RYE, OR BARLEY PRODUCTS.

The manufacture and distribution of the following corn, oats, rye, and barley products are licensed:

Barley flour.

Rye flour.

Oatmeal.

Rolled oats.

Hominy.

Corn grits.

Corn meal.

Corn flour.

Starch from corn.

Oat flour.

Cerealine flakes.

Corn oil.

Corn sirup.

Glucose.

Corn sugar.

Products and by-products of shelled corn, ear corn, oats, rye, and barley for use as feed, including grain screenings.

NOTE.—Any corn, oats, or barley millers who resell corn, oats, or barley without milling them must have a license to deal in these commodities and are subject to rules governing dealers therein. Any corn, oats, or barley miller buying any products of corn, oats, or barley and reselling them must have a license to deal therein, and are subject to the rules governing jobbers in such commodities.

Rule 4. Unreasonable profits prohibited.—The licensee shall sell edible products of corn, oats, rye, and barley at not more than a reasonable margin over the average cost to him of the corn, oats, rye, or barley from which such edible products are manufactured. In estimating such average cost he shall include all grain in his possession or under his control by contract or other arrangement, but he shall not include any grain which he has contracted to sell or the products of which he has contracted to sell. Provided, that in determining the cost of such grain he shall—

(1) Add to the average purchase price the loss, and deduct from the average purchase price the gain, resulting from any hedging transactions on an established grain exchange in which the transaction is finally closed. The loss or gain on such transaction shall be calculated on the average price of all outstanding hedging sales or purchases.

(2) He shall deduct from the average purchase price the proceeds from the sale of feed or offal created in the milling operation, or, if not sold, he shall deduct its current market value.

Any average once calculated shall be taken as the basis for such averaged grain in all subsequent calculations.

He shall keep records in such manner as to show how all averages and selling prices have been determined. (Rule issued Sept. 1, 1917, provided rye or rye products should not be handled on unjust or unreasonable profit. Rule of Nov. 1, 1917, provided rye flour should be sold at not more than reasonable advance over cost. Issued July 20, 1918, as noted here; repealed Feb. 1, 1919.)

Semiannual profits.—The Food Administration will consider a net earning of more than 6 per cent upon the gross sales of any edible products of corn, oats, rye, or barley as shown at the end of any semiannual period, to be prima facie evidence of a violation of the rule which prohibits the taking of unreasonable profits (general rule 5). This limitation does not modify or abrogate the general principle contained in the Food Administration regulations that a licensee should not earn more than a reasonable net profit on his capital invested, nor does it change in any way the maximum margins which have been prescribed on individual sales. (Issued Sept. 1, 1918.)

(New, Nov. 7, 1918.) **Semiannual profits of wet corn millers.**—The Food Administration will consider a net earning of more than 6 per cent upon the gross sales of all products or by-products of corn, whether such products or by-products are sold, pure or mixed with other commodities, by any licensee engaged in the milling of corn for the production of starch or glucose and other products from the manufacture of starch, to be prima facie evidence of a violation of the rule which prohibits the taking of unreasonable profits (general rule I—A—5). This percentage will be calculated for each of the two semiannual periods making up the licensee's fiscal year. The Federal income and excess-profits taxes may not be deducted as expenses or otherwise, but all other taxes may be considered as expenses. This limitation does not modify or abrogate the general principle contained in the Food Administration regulations that a licensee should not earn more than a reasonable net profit on its capital invested.

Rule 5 (as amended Nov. 1, 1918). Profits on feeds.—The licensee shall not sell hominy feed, hominy meal, hominy chop, gluten feed, oil-cake meal, or other feed by-product of corn, hominy feed, rye feed, or oat feed, produced as a by-product of the manufacture of corn, barley, rye, or oat products at a price per pound in excess of the purchase price per pound of the grain from which it is manufactured. (Rule issued July 20, 1918, applied to hominy feed, hominy meal, hominy chop, barley feed, rye feed, or oat feed. Nov. 1, 1918, commodities added as noted here. Repealed Dec. 17, 1918.)

Rule 8. Package differentials on corn meal.—The licensee shall not sell corn meal, corn grits, hominy, corn flour, barley flour, or rye flour, except on the basis of the following differentials:

Package differentials.—The following package differentials apply to all sales of buckwheat flour:

Basis of 100 pounds cotton or jute bags.

	Cents per 100 pounds.
50 pounds cotton-----over basis--	10
25 pounds cotton-----do----	20
10 pounds cotton-----do----	50
5 pounds cotton-----do----	75
50 pounds paper-----under basis--	10
25 pounds paper-----do----	5
10 pounds paper-----over basis--	15
5 pounds paper-----do----	30
3 pounds paper-----do----	45

Extra charge for burlapping, baling, or double sacking, 35 cents per 100 pounds.

(Rule issued May 22, 1918, fixed differentials for corn meal, corn grits, hominy. July 20, 1918, corn, barley, and rye flour added and differentials changed as noted here. Repealed Dec. 17, 1918.)

C. SPECIAL LICENSE REGULATIONS GOVERNING LICENSEES ENGAGED IN THE BUSINESS OF MANUFACTURING BUCKWHEAT PRODUCTS.

(Effective Nov. 15, 1918.)

Rule 1. Unreasonable profits prohibited.—The licensee shall sell buckwheat flour at not more than a reasonable margin over the average cost to him of the buckwheat from which such flour is manufactured. In estimating such average cost he shall include all grain in his possession or under his control by contract or other arrangement, but he shall not include any grain which he has contracted to sell or the products of which he has contracted to sell; *provided*, That in determining the cost of such grain he shall deduct from the average purchase price the proceeds from the sale of feed or offal created in the milling operation; or if not sold, he shall deduct its current market value. Any average once calculated shall be taken as the basis for such averaged grain in all subsequent calculations.

He shall keep records in such manner as to show how all averages and selling prices have been determined. (Repealed Jan. 10, 1919.)

Norm.—The Food Administration has determined that the sale of buckwheat flour at a gross margin in excess of \$1.25 per 100 pounds bulk product over the cost of the buckwheat is unreasonable and excessive under the foregoing rule. These margins may therefore be regarded as maximum margins, but they do not in any way abrogate or modify the general rule that profits must not be excessive.

The Food Administration will further consider a net earning of more than 10 per cent on the first \$25,000 of gross sales of buckwheat products and 8 per cent on all gross sales over \$25,000 as prima facie evidence of a violation of the rule which prohibits the taking of unreasonable profits (general rule 5). This limitation does not modify or abrogate the general principle that a licensee should not earn more than a reasonable net profit on capital invested.

Differentials on less than car-lot sales.—The following additional margins over the \$1.25 maximum will be considered reasonable by the Food Administration on less than car-lot sales, but this does not modify in any way the 10 per cent and 8 per cent limitation of net profits. The additional margin should be calculated on car-lot price in sacks:

(a) Less than car lots to wholesalers or flour mixers, not more than 4 per cent.

(b) Less than car lots to bakers, hotels, or retailers, not to exceed 10 to 12½ per cent in packages of 25 pounds or over; not to exceed 12 to 15 per cent in packages less than 25 pounds.

(Only one of the three foregoing additional margins may be added on any lot.)

V. RICE.

A. SPECIAL REGULATIONS GOVERNING DEALERS IN ROUGH RICE.

Rule 1. Maximum margin over cost fixed.—The licensee shall not sell rough rice, except for seed, at an advance over the actual purchase price of the particular rice sold in excess of 1 per cent of such purchase price plus the storage charge, insurance, and interest on the investment at the rate of 6 per cent per annum. (Issued Nov. 1, 1917; repealed Jan. 10, 1919.)

Rule 2 (as amended Oct. 31, 1918). Brokers and commission merchants' charges limited.—The licensee in acting as a broker in rough rice, or in receiving rough rice on consignment, shall not charge a commission of more than 1 per cent for selling such rice to any person except for seed purposes.

If the licensee performs additional services these shall be included as separate items on the account sales, and a separate charge shall be made therefor, in no case to exceed an additional $1\frac{1}{2}$ per cent. (Issued July 29, 1918; amended Oct. 31, 1918; repealed Jan. 10, 1919.)

Rule 3. Resales prohibited.—The licensee shall not sell rough rice, except for seed, to any person other than a rice miller. (Issued July 29, 1918; repealed Jan. 6, 1919.)

Rule 4. Amount of rough rice under control limited to 60 days' supply.—The licensee shall not keep on hand or have in possession or under control by contract or other arrangement any rough rice, except for seed purposes, in a quantity in excess of his reasonable requirements during the period of 60 days. (Issued Nov. 1, 1917, as to "any food commodities"; repealed Jan. 6, 1919.)

Rule 5. Contracts must provide for shipment within 60 days.—The licensee shall not make any contract for rough rice for delivery more than 60 days after the making of the contract, except for seed. (Issued Nov. 1, 1917, as to "any food commodities"; repealed Jan. 6, 1919.)

B. SPECIAL REGULATIONS GOVERNING RICE MILLERS AND MANUFACTURERS OF RICE FLOUR.

Rule 6. Clean rice not to be sold at more than reasonable advance over cost.—Any licensee engaged in the business of milling rice shall sell cleaned rice at not more than a reasonable advance over the cost of such rice without regard to the market or replacement value at the time of sale. (Issued Nov. 1, 1917; repealed June 16, 1919.)

NOTE.—Brokers' commissions.—Brokers will be considered by the Food Administration as making an unreasonable and exorbitant charge for negotiating the sale of rice or rice products in any case where the brokerage exceeds—

(a) Seven cents per 100 pounds on carload orders, except brewer's rice, sold in the following cities: New York; San Francisco; Charleston; Savannah; Jacksonville, Fla.; St. Louis; Chicago; Kansas City, Mo.; Galveston and Houston, Tex.

(b) Six cents per 100 pounds on any quantity of rice, except brewer's rice, sold in New Orleans.

(c) Eight cents per 100 pounds for carload orders, except brewer's rice, sold at any other point except those designated in (a) and (b).

(d) Six cents per 100 pounds on brewer's rice sold at any point and in any quantity.

(e) Twenty-five cents per ton on rice bran or rice polish at any point and in any quantity.

(f) Six cents per 100 pounds on rice flour sold at any point and in any quantity.

Rule 7. Maximum margins governing manufacturers of rice flour.—The licensee shall not sell rice flour at an advance of more than 75 cents per 100 pounds over the purchase price of brewer's rice or screenings delivered at the mill. (Issued July 29, 1918; repealed June 16, 1919.)

VI. SUGAR.

A. SPECIAL REGULATIONS APPLYING TO ALL MANUFACTURERS AND REFINERS OF CANE SUGAR AND BEET SUGAR.

Rule 8. Prices shall conform to price list furnished.—The manufacturer shall furnish to the United States Food Administrator, Washington, D. C., and deliver to the trade a price list showing his selling price and all selling terms and differentials in force. After such price list or any subsequent price list is issued the manufacturer shall make no sales of sugar except at the price, differentials, and terms shown in the price list then in force until he has mailed to the United States Food Administrator a new price list showing any change made

in said price, differentials, or terms and has received the written approval of the United States Food Administrator to any change in differentials and to any addition to the list of new types of sugar or styles of packages: *Provided*, That every price list and contract to sell sugar shall include a stipulation that in case a change in the United States Food Administration regulations authorizes a higher price than that named in the contract or price list before the arrival of the sugar at destination, the refiner shall have the right to raise his price to such higher price, and that in case such change requires sales at a lower price than that named in the price list or contract before the arrival of the sugar at destination, the refiner shall be required to reduce his price to such lower price. (Issued Oct. 1, 1917; added to July 1, 1918; repealed Jan. 26, 1919.)

NOTE.—The issuance of price lists by manufacturers of beet sugar will not be necessary until August 1, 1918, and after that date it will be dispensed with in cases in which the manufacturer shall have entered into a proposed voluntary agreement with the United States Food Administrator prescribing other methods of supplying such information.

Rule 4. Maximum brokerage fixed.—The manufacturer shall not pay any broker commissions in excess of one-fourth of 1 per cent on the value of raw sugar bought, or in the case of refined or semirefined sugar sold in excess of 5 cents per hundred pounds, excepting, however that a higher commission may be paid for any special service if first approved by the United States Food Administrator. (Rules issued Oct. 1, 1917; limited brokerage on beet sugar to 5 cents per 100 pounds cane sugar as noted here. Combined June 15, 1918, as noted here; repealed Jan. 26, 1919.)

Rule 5. Double brokerage prohibited.—The manufacturer shall not allow or pay to any person any brokerage or commission on sugar or its by-products on which he knows a commission or brokerage to have already been paid. (Issued Oct. 1, 1917; repealed Jan. 26, 1919.)

B. SPECIAL REGULATIONS APPLYING TO REFINERS OF CANE SUGAR.

Rule 2. Sugar to be sold at reasonable advance over cost.—The manufacturer shall sell his sugar at not more than a fair and reasonable advance over cost. (Issued Oct. 1, 1917; repealed Jan. 26, 1919.)

NOTE.—The United States Food Administration will announce from time to time what advance it considers fair.

Rule 3. Price of sirups and molasses.—The licensee shall not sell the following products, when manufactured from imported raw cane sugar, at prices to exceed those named below, which are based on the cost of imported raw sugar to the refiner. (Issued June 15, 1918; repealed Jan. 26, 1919.)

	Per gallon, in barrels.	Per gallon, in bulk.
	Cents.	Cents.
Refiner's sirups, highest grade (fancy filtered).....	55	50
Refiner's sirups, medium grade (filtered).....	40	35
Refiner's sirups, low grade (unfiltered).....	30	25
Blackstrap molasses.....	23	19

The prices named are f. o. b. cars at primary markets or port of entry, for point of production if carrying same freight rate as from primary markets, net cash in 10 days without discount, and shall include brokerage and any profit taken by a distributor in tank cars direct from the refinery, but shall not include freight or tank-car charges.

NOTE.—Any questions in regard to the grading of fancy, medium, and low-grade sirups will be determined by the United States Food Administration committee on sirup valuations.

Preference to domestic orders for sirup.—The Food Administration urgently requests that in accepting and filling orders for refiners' sirups preference be given domestic customers over exporters. If this is not done voluntarily, it will be necessary to consider regulations limiting the export of such shipments.

C. SPECIAL REGULATIONS APPLYING TO PRODUCERS OF BEET SUGAR.

Rule 2. Unreasonable profit prohibited.—The manufacturer shall sell beet sugar, beet molasses, and beet pulp at not more than a fair and reasonable advance over cost. (Issued June 15, 1918; repealed Jan. 26, 1919.)

NOTE.—The United States Food Administration will announce from time to time what advance it considers fair. Until further notice any sales of beet sugar at a price in excess of the selling price, at the same time and place of standard granulated sugar made from cane produced in the United States (including insular territories), will be considered evidence of a violation of this rule.

Beet molasses.—Until further notice any sales of beet molasses at a price in excess of 18 cents a gallon in bulk or 23 cents a gallon in barrels, f. o. b. factory net cash in 10 days without discount will be considered evidence of a violation of this rule. This price shall include brokerage and any profit taken by a distributor in tank cars direct from factory, but shall not include freight or tank-car charges.

Beet pulp.—The Food Administration will regard any sales of beet pulp at prices greater than those named below as a violation of the above rule:

Beet pulp wet from factory or from silo within first 80 days after manufacture, 80 cents per ton.

Beet pulp out of silo after 80 days therein, \$1.25 per ton.

Dried pulp sacked, f. o. b. factory, \$40 per ton.

D. SPECIAL LICENSE REGULATIONS APPLYING TO MANUFACTURERS OF REFINED, SEMIREFINED, AND RAW SUGAR PRODUCED FROM SUGAR CANE GROWN ON THE MAINLAND OF THE UNITED STATES AND SOLD FOR DIRECT CONSUMPTION.

Rule 2. Unreasonable profits prohibited.—The manufacturer shall sell his sugar at not more than a fair and reasonable advance over cost. (Issued July 31, 1918; added to Oct. 21, 1918; repealed Jan. 26, 1919.)

NOTE.—The United States Food Administration will consider as a violation of the above rule any sale of direct consumption sugar at a price in excess of \$9 per 100 pounds f. o. b. seaboard points or points of production carrying the same freight rate as seaboard points, with the customary discounts, terms, and conditions, less the following differentials:

Plantation granulated.....	No differential.
White clarified.....	10 cents per hundredweight.
Off plantation granulated.....	10 cents per hundredweight.
Off white.....	15 cents per hundredweight.
Choice yellow clarified.....	15 cents per hundredweight.
Prime yellow clarified.....	20 cents per hundredweight.
Kettle.....	20 cents per hundredweight.
Off yellow clarified.....	30 cents per hundredweight.
Seconds and thirds (first group).....	80 cents per hundredweight.
Seconds and thirds (second group).....	90 cents per hundredweight.
Seconds and thirds (third group).....	\$1 per hundredweight.
Seconds and thirds (fourth group).....	\$1.10 per hundredweight.
Seconds and thirds (fifth group).....	\$1.20 per hundredweight.

The differential on all grades of semirefined direct-consumption sugars not listed above shall be the differential indicated for sugars of equal grade; or if of an intermediate grade, at the differential of the listed grade next below; and the differential on sugars, the grade and price of which can not be thus determined, shall be fixed by the said sugar committee. The above grades shall be determined with reference to the standard samples thereof as fixed by the New Orleans Sugar and Rice Exchange, with the approval of the United States Food Administration, and now on file with said exchange. In case of dispute regarding the grade, the final decision shall be made by the Louisiana sugar committee. The Food Administration will further consider as a violation of the above rule any sale of raw sugar at a price delivered at customary Louisiana refining points in excess of \$7.28 per 100 pounds for 96° test, and any sale of washed sugar (which is defined as any first sugar above the grade of raw sugar and below the grade of off yellow clarified, and having a color test of not less than 22 Dutch standard) at a price in excess of \$7.68 per 100 pounds, with an addition of one-sixteenth cent per pound for every degree or fraction thereof above 96° and a reduction of one-tenth cent per pound for every degree or fraction thereof below 96°.

VII. CANNERS OF PEAS, TOMATOES, CORN, DRIED BEANS, SALMON, SARDINES, AND TUNA, AND MANUFACTURERS OF TOMATO CATSUP, TOMATO SOUP, AND OTHER TOMATO PRODUCTS; CONDENSED, EVAPORATED, OR POWDERED MILK.

A. SPECIAL REGULATIONS GOVERNING LICENSEES ENGAGED IN THE BUSINESS OF CANNING PEAS, CORN, TOMATOES, DRIED BEANS, SALMON, SARDINES, OR TUNA, OR MANUFACTURING TOMATO SOUP, TOMATO CATSUP, OR OTHER TOMATO PRODUCTS.

(The following special rules correspond to series B, and in so far as they apply to the canning of peas, corn, tomatoes, dried beans, salmon, or sardines became effective Nov. 1, 1917, unless otherwise noted. They became effective as to tomato catsup and other tomato products other than canned tomatoes on Feb. 28, 1918. They became effective as to canned tuna on June 15, 1918.)

Rule 2. Manufactured products must be sold at not more than reasonable advance over average cost.—The licensee shall sell goods manufactured and on hand for not more than a reasonable advance over the average cost of the season's pack, without regard to the market or replacement value at the time of such sale. (Issued Nov. 1, 1917, providing for sale at "not more than reasonable advance over cost of such goods"; changed Jan. 28, 1918, to present form; repealed Jan. 10, 1919.)

The canned-goods division, under date of September 7, 1918, issued the following announcement:

TO CANNERS AND DISTRIBUTORS OF LICENSED CANNED VEGETABLES.

In order to make clear the attitude of the Food Administration in regard to the rules and regulations governing canners and distributors of licensed canned vegetables, the following announcement is made in regard to canned corn, canned tomatoes, and canned peas:

1. Future sales.—Before invoicing goods which were sold for future delivery, canners have been instructed to review their estimate of cost, and if it is determined at the time of shipment that the actual cost is lower than the estimated cost, prices must be revised by the canner so that the margin of profit will not exceed the maximums announced as reasonable.

2. Revision of prices.—Revision of prices must occur before invoicing. It would be impracticable to rebate throughout the channels of distribution in order to give the consumer the benefit of lower prices; therefore the canner's invoice price is the final price, and no revision after invoicing will be permitted, with this exception:

If the direct customer of a canner will agree to accept delivery and withhold the goods from distribution, the canner will be permitted to bill at the time of shipment at the future contract price, pending the final determination of his cost at the end of his pack. In this case the purchaser must make payment on the basis of this invoice and in accordance with its terms permitting the canner to make final adjustment, if any, in the form of a rebate. The purchaser must in such cases await the canner's final price before invoicing these goods.

3. Spot sales.—Canners who have made delivery in good faith at future contract prices and later find their costs are lower than anticipated must sell the balance of their pack at such prices as to insure their making no more than the maximum margins on the entire season's output. In these cases purchasers who have already received shipments at the contract price must be given the opportunity of purchasing such surplus at the lower price. This surplus must be offered to such purchasers pro rata up to a quantity equal to their future purchases.

The canned foods and distribution division issued the following announcement, under date of October 22, 1918:

TO CANNERS AND DISTRIBUTORS OF LICENSED CANNED VEGETABLES.

(Statement supplementing announcement of Sept. 9, 1918—Revision of contract prices.)

As many inquiries have been received with reference to the proper construction of the announcement made September 9, 1918, as to the revision of contract prices of canned corn, canned tomatoes, and canned peas, it is deemed advisable to make the following general statement:

Where the packer's profits prove to be greater than those permitted by the rules of the Food Administration, he shall remit the excess to the purchaser, who shall credit the amount received by him upon the average cost of goods of the same grade and size of the same commodity then in his possession or invoiced to him.

Attention is called to the fact that the rules permit, but do not require, that goods of different brands be averaged. In a spirit of fairness to the packer, therefore, the purchaser should apply the reduction in cost first to goods then in his possession under packers's label, up to an amount in cents per dozen equal to the rebate, before applying the reduction in cost to goods under other labels.

If the purchaser's stock of such goods is so small as to make this impracticable or the price ridiculous, he shall apply to the wholesale section of the Food Administration for instructions.

The packer shall make to the canned foods division of the Food Administration a statement giving the names of the purchasers to whom such payments are made, the amount of each payment, and stating the grade and size of the canned goods on account of which each payment is made.

The purchaser shall also make a written statement to the wholesale section of the Food Administration showing the amounts so received, from whom received, and how the same were credited.

The wholesaler will not be permitted to make any rebate to the retailer on the price of any goods already delivered to the retailer.

In this connection attention is called to the fact that the wholesaler can not sell at a price which will enable him to realize more than the prescribed margin of profit over the average cost, reduced as above provided for. The average cost is to be determined in the manner required by the rules and regulations.

(Rules 6 to 11 apply to the canning of fresh vegetables and fish only.)

Rule 6. Quotations or sales before February 1 prohibited.—The licensee shall not quote for future packing or delivery or sell any canned peas, canned corn, canned tomatoes, tomato soup, tomato catsup, or other tomato products, canned salmon, canned sardines, or canned tuna before February 1 of the year in which such products are to be canned: *Provided*, That this rule shall not apply to sales to the Government of the United States. (Issued Nov. 1, 1917; repealed Jan. 10, 1919.)

NOTE.—This rule corresponds to special rule 1, series B, governing canners. It was amended to its present form January 28, 1918. "Shall not quote for future packing or delivery or sell" includes acceptance of orders subject to approval of price when named. This rule prohibits the acceptance of conditional orders or commitments of every kind.

Rule 9. Licensee must not buy commodities already sold.—No licensee shall buy or contract to buy any of the vegetables or fish required for the above-mentioned products if he has reason to believe that the seller has already contracted to sell the said materials to other persons. In buying vegetables or fish for such products he shall require the seller to state in writing, in the contract or otherwise, that he has not contracted to sell said vegetables or fish to others. (Issued Nov. 1, 1917; repealed Dec. 3, 1918.)

NOTE.—This rule corresponds to special rule 5, series B, governing canners.

The canned goods division issued the following announcement on November 1, 1918:

The Food Administration has been able to arrange for a sufficient quantity of tin plate to permit the packing of beans. Permission is herewith granted to canners of beans to pack during the months of November, December, and January a total quantity not in excess of a normal pack for these three months. Canners may use up all odd-sized tins now on hand, but additional purchases of tins smaller than No. 2 size will not be permitted. It is still necessary for all shippers selling beans to canners to secure permits before making sales. Canners may not, however, contract for more than a three months' supply of cans or beans.

ESTABLISHED PRICES—CANNED GOODS DIVISION.

The canned goods division has prepared the following, which shows what has been done in establishing prices on commodities under its supervision :

CANNED SALMON.

Conferences were held with the State food administrators and fishermen on the coast and maximum prices were adopted which were as follows :

RAW FISH.

Alaska section.	Kings (each).	Reds (per fish).	Cohoos (each).	Dogs (each).	Pinks (each).
Bristol Bay.....	\$0. 40	\$0. 07	\$0. 07	\$0. 04	\$0. 02
Herendeen Bay.....	. 25	. 12½	. 12½	. 08	. 04
Central Alaska.....	. 50	. 12	. 12	. 05	. 04
Yukutat:					
Over 15 pounds.....	. 40				
Under 15 pounds.....	. 15	. 12	. 12		. 01½
Southeast Alaska.....	1. 00	. 32	. 32	. 09	. 06

¹ Per pound.

Oregon :		
Columbia River—		Cents.
Chums		3½
Chinooks.....		{¹ 3½
Then		{² 5
Silversides		6½
Steelheads		6½
Steelheads		9½
Rogue River—		
All grades		6½
Chinooks		5

Washington coast streams.	Prices per pound.		
	Chinooks.	Cohoos.	Chums.
	Cents.	Cents.	Cents.
Grays Harbor	6½	6½	3
Willapa Harbor.....	6½	6½	3
Tohola².....	5½	5½	3
Noclips.....	6½	6½	3½
Queets River.....	4½	4½	2½

After reaching a basis for maximum prices to be paid to the fishermen, a committee consisting of three State food administrators, Mr. Deming, who represented the division of coordination of purchase, and Mr. Warren, who represented the canned foods division, investigated packing costs in Alaska and the following maximum prices on the different grades were established.

CANNED SALMON.

Alaska salmon.	No. 1 talls (per dozen).	No. 1 flats (per dozen).	Halve- flat (per dozen).
Reds.....	\$2. 35	\$2. 50	\$1. 65
Medium reds.....	2. 25	2. 40	1. 65
Pinks.....	1. 65	1. 80	1. 10
Chums.....	1. 60	1. 75	1. 10

¹ To Sept. 10.

² To Sept. 20.

³ 80 cents per box to be paid for hauling to Noclips, including return of empty boxes.

Since the Alaska prices were established the following maximum prices have been established for salmon caught in Oregon waters and salmon caught in Washington waters:

COLUMBIA RIVER AND OREGON COAST STREAMS.

	No. 1 talls (per dozen).	No. 1 flats (per dozen).	Halves (per dozen).
Fancy spring chinooks.....	\$3. 15	\$3. 25	\$2. 00
Standard spring and No. 1 fall chinooks.....	2. 75	2. 85	1. 75
Blue backs.....			2. 00
No. 2 fall chinooks.....	2. 30	2. 40	1. 50
Silver sides.....	2. 40	2. 50	1. 00
No. 3 chinooks and chums.....	1. 75	1. 85	1. 10

PUGET SOUND AND WASHINGTON COAST STREAMS.

	Talls (per dozen).	Flats (per dozen).	Halves (per dozen).
Fancy springs or chinooks.....	\$3. 15	\$3. 25	\$2. 00
Standard springs or chinooks.....	2. 75	2. 85	1. 75
Cohoos.....	2. 40	2. 50	1. 00
Chums.....	1. 75	1. 85	1. 10

CANNED SARDINES.

Eastern.—The Maine State food administrator early in this year called a conference of the fishermen heavily interested, and a price of \$25 per hogshead for raw fish was established as the maximum price to be paid by the packers.

A little later a committee representing a very large proportion of the Maine sardine packers appeared before Mr. Munn and a voluntary maximum price was established of \$6.50 per case for one-quarter oil canned sardine. Later the Canadian authorities adopted the American prices as maximum.

Western.—The sardine situation has recently been handled in California by Mr. Munn in conferences held with the fishermen and packers, and the basis is as follows:

Maximum prices for raw sardines:	Per ton.
Under 7½ inches.....	\$30
Over 7½ inches.....	15

Based on these raw-fish prices, the following maximum canned sardine prices were approved:

	Tomato (per case).	Oil (per case).
Quarter round.....	\$3. 25	\$3. 35
One-half round.....	4. 00	4. 15
Ones round.....	5. 75	6. 00
Ones oval.....	7. 25	.....
One-half oval.....	5. 50	.....

CANNED TUNA.

The tuna situation was handled by conferences with the fishermen at which the maximum prices for raw tuna were established as follows:

One hundred and ten dollars per ton for Albacore and blue-fin tuna, and \$100 per ton for all other tuna.

Later the cannerys were gotten together and the prices on canned tuna were established as follows:

	Per doz.
48/1's.....	\$3. 37½
48/½'s.....	1. 90
48/¼'s.....	1. 25

CANNED CORN, PEAS, AND TOMATOES.

It has been impossible to reach the grower. The canner, however, has been on the basis of maximum margins of profit as announced in Bulletin No. 38, issued by the canned goods division on May 1, 1918, which reads as follows:

Based on the views of the Federal Trade Commission of reasonable profit and the Food Administration's valuation of reasonable crop hazard insurance, the following maximum margins in cents per dozen cans are announced for licensed canners between cost and selling price. Excess of these margins will be considered unreasonable under the food-control act.

Cost shall not include income and excess profits taxes, interest on investment, interest on long-term notes, or crop hazards.

Corn (per dozen cans) :	Cents.
No. 2, standard-----	19
No. 2, extra standard-----	22
No. 2, fancy-----	30
Peas (per dozen cans) :	
No. 2, substandard (average all sizes)-----	15
No. 2, standard (average all sizes)-----	22
No. 2, fancy (average all sizes)-----	31

NOTE.—Greater margins on smaller sizes of peas, offsetting less margins on larger sizes, will be allowed, provided the average does not exceed margin announced.

Tomatoes (per dozen cans) :	Cents.
No. 2, standard-----	18
No. 2½, standard-----	22
No. 3, standard-----	27
No. 3, fancy-----	31
No. 10, standard-----	90
No. 10, fancy-----	100

NOTE.—From the margins on standard tomatoes a deduction of 5 cents per dozen on Nos. 2, 2½, 3, and of 15 cents per dozen on No. 10 shall be made for the substandard grade.

While profits shall be reasonable, the Food Administration adopts the general principle, applicable to all important producing agencies, that profits must be sufficient to encourage production.

These margins are believed to be ample to provide a fair stimulative profit to the canners, with due consideration to labor difficulties, crop hazards, and the peculiar uncertainties incident to this industry.

We emphasize the fact that the margins are maximum margins and must be considered as guides only. They do not change the rules.

This industry, like all others subject to license, should be guided by the general principle that what would have been a satisfactory profit in the prewar period on an even market, under freely competitive conditions, should be the standard to-day, and no maximum named as a guide should be accepted as an invitation to exceed this former standard.

The practice of selling the pack, or a large proportion of it, in advance of its production is an outgrowth of conditions existing in this industry. It is a safeguard, both for farmers and for canners, and the practice, properly conducted in accordance with the rules and regulations of the Food Administration, tends strongly to remove the dangerous speculative features otherwise incident to the business.

B. SPECIAL REGULATIONS GOVERNING LICENSEES ENGAGED IN THE BUSINESS OF MANUFACTURING CONDENSED, EVAPORATED, OR POWDERED MILK.

Rule 2. Goods must be sold for not more than reasonable advance over average cost.—The licensee shall sell condensed, evaporated, and powdered milk for not more than a reasonable advance over the average cost of the season's pack without regard to the market or replacement value at the time of such sale. (Issued Nov. 1, 1917, providing for sale at "not more than reasonable advance over cost of such goods." Changed to present form Jan. 28, 1918; repealed Jan. 10, 1919.)

VIII. SPECIAL REGULATIONS GOVERNING LICENSEES ENGAGED IN THE BUSINESS OF PREPARING OR PACKING DRIED PEACHES, DRIED APPLES, DRIED PRUNES, OR DRIED RAISINS.

Rule 2. New-crop fruits not to be bought or sold before July 15.—The licensee, prior to July 15 of the year in which new-crop fruits are to be grown and packed shall not buy, contract to buy, offer for sale, or have outstanding any contract of sale or any commitment for sale of new-crop fruits not available for spot delivery. A commitment shall include all tentative or conditional orders

whether definite prices are named or not. (Rule issued Mar. 30, 1918, forbade sales before May 1. Changed to June 1 on Apr. 30, 1918; changed to July 15 on May 24, 1918; repealed Jan. 10, 1919.)

Rule 4. Dried fruits must be sold at not more than a reasonable advance over cost.—The licensee shall sell his products for not more than a reasonable advance over the cost of said products and without regard to market or replacement value at the time of said sale. (Issued Mar. 30, 1918; repealed Jan. 10, 1919.)

DRIED FRUITS.

Rule VIII-A-2.—The canned goods and dried fruits division has prepared the following, which shows what has been done in establishing prices on dried fruits. The dried fruit situation has been handled largely by Mr. Merritt, State food administrator for California, and his conferees. In each instance a large majority of the representative growers have been brought together and voluntary agreements have been reached covering the maximum prices. The dried fruit packers were then handled in the same way and adopted a maximum of profit of 4 per cent.

The prices for dried fruits in California are as follows:

PEACHES.

Maximum price to grower, 11 cents, which includes 8 per cent gain in dip already agreed upon.

Maximum price to trade.

	Cents.
Choice yellow, bulk basis.....	11½
Fancy yellow, bulk basis.....	12½
Choice muir, bulk basis.....	11½
Fancy muir, bulk basis.....	12½

(Add 1 cent per pound for 50's and 1½ cents for 25's.)

RAISINS.

Buying price to grower.

	Cents.
Muscat	5½

Selling price to trade.

Fancy seeded.....	\$0.0962
Choice seeded.....	.09125
Bulk seeded.....	1.08
Loose 2 crown.....	1.075
Loose 3 crown.....	1.08

PRUNES.

	Cents.
40-50 bulk basis.....	10
50-60 bulk basis.....	9
70-80 bulk basis.....	8½

The Oregon situation was handled by Mr. Ayer. The Oregon prices on prunes are as follows:

	Cents.
40-50 bulk basis.....	10
50-60 bulk basis.....	9
60-70 bulk basis.....	9
70-80 bulk basis.....	8½

DRIED APPLES.

While dried apples are licensed, it has been found impossible to reach any general voluntary agreement with the growers owing to the peculiar production feature, in that they are produced practically everywhere. We are, however, attempting to regulate the profits of packers on the 4 per cent maximum basis.

¹ Per lb. in 25-lb. boxes.

Rule VIII-A-2 is not to be construed as prohibiting the making of a contract whereby a packer or association agrees with a grower to market the grower's crop at the price prevailing when the crop is marketed; nor is the rule to be construed as affecting any such contracts that are already outstanding. (Opinion A-106, July 22, 1918.)

Rule 5. Price lists and circulars to be mailed Food Administration.—Licensees quoting dried fruits for shipment in carload lots shall mail promptly to the dried-fruit division of the United States Food Administration, Washington, D. C., all price lists and circulars relating to prices on dried peaches, apples, prunes, or raisins. (Issued Mar. 30, 1918; repealed Dec. 3, 1918.)

NOTE.—Rules 2, 3, 4, and 5 correspond to special rules 1, 2, 3, and 4, series B, supplement 16, effective March 30, 1918. Rules 4 and 5 were amended to their present form May 24, 1918.

IX. DEALERS AND BROKERS IN, AND IMPORTERS OF CERTAIN VEGETABLE OILS AND THEIR RAW MATERIALS.

A. SPECIAL REGULATIONS GOVERNING LICENSEES DEALING IN COTTON SEED AND PEANUTS, BROKERS IN SUCH COMMODITIES, AND COTTON GINNERS.

Rule 3. Licensee must not pay higher prices for cotton seed¹ or peanuts² in one market than in another.—No licensee shall pay or offer to pay higher prices for cotton seed or peanuts in one market than he pays or offers to pay for cotton seed or peanuts of the same quality in any other market: *Provided, however,* That when zones are established as mentioned in the note to Rule B-8, he may pay varying prices in the several zones, but must pay the same price at all points in the same zone on the same day for cotton seed or peanuts of the same quality. (Issued July 1, 1918.)

Rule 5. Cotton seed¹ or peanuts² to be sold at not more than reasonable advance over cost.—The licensee shall sell cotton seed and peanuts at not more than a reasonable advance over the actual cost to him of the particular cotton seed or peanuts, sold without regard to the market or replacement value at the time of sale. (Issued Nov. 1, 1917, making exception for licensees who could not keep separate the purchase and manufacturing costs of particular commodities, and forbidding averaging costs, etc., of separate mills operated by a licensee.)

NOTE.—Effective July 1, 1918, and until further notice the United States Food Administration will regard any sale of cotton seed at advances greater than those indicated below over the prices paid for such cotton seed as a violation of the above rule:

(1) Purchase and sale of cotton seed where the licensee provides the necessary facilities and capital, and bears the expenses and risks incident to the business, \$3 per ton (including delivery and loading of seed into cars at mills).

(2) Purchase and sale of cotton seed where the licensee operates as principal but his capital is furnished by another, and his expenses and business risks and facilities, in whole or in part, are borne by another, or where the licensee operates as agent under his own license or under the license of another, \$1.50 for each ton of cotton seed negotiated by him. The remainder of the margin as provided for in paragraph 1 shall be retained by the party or parties furnishing the capital and facilities and assuming the risks and expenses, in whole or in part.

(3) Any margin or commission in excess of 25 cents per ton to a licensee operating either as broker or as dealer who buys and sells cotton seed in car lots will be regarded as unreasonable. Any commission must be paid by either the seller or final buyer out of his spread or margin, and if any dealer in car lots takes a margin for such handling the person who buys from him shall deduct such margin from his own permissible spread or margin unless it has already been deducted by the original seller.

Rule 8. Unreasonable charges by ginner prohibited.—No licensee owning, controlling, or operating a ginnery shall make any unreasonable charge for the service of cleaning seed cotton or separating the seed from the lint. (Issued Nov. 1, 1917; repealed May 31, 1919.)

NOTE.—The United States Food Administration may determine and announce a maximum charge that may be made by licensees for performing the service known as ginning.

Ginner shall keep a correct record showing the name and address of each party for whom they gin cotton, the amount of cotton ginned in each case, and the actual charge made for each service. They must also keep a careful record showing the name and address of each party from whom they purchased cotton seed, together with the quantity and price paid for the same. They must at all times be prepared to furnish detailed information to the United States Food Administration.

¹ Repealed May 31, 1919.

² Repealed Nov. 13, 1918.

The charge for ginning should be the same whether or not the cotton or the cotton seed is purchased by the ginner.

Ginners should gin as rapidly as possible consistent with good work all dry seed cotton tendered them, and upon demand they should return to the owner the cotton and cotton seed ginned by them. If cotton seed is purchased by the ginner, he becomes a dealer therein, and must be guided by the margins indicated under Rule 5, above.

Rule 9. Maximum buying margin below carload market price prescribed.—A licensee who buys cotton seed in less than carload quantities for sale or shipment in carload quantities shall buy at a gross margin below the carload market price at railroad points, not to exceed \$3 per ton. The cost of hauling from distant points to the railroad may also be deducted. (Rule issued Dec. 7, 1917, provided "No licensee shall sell any cotton seed in car lots at more than \$2 per ton, exclusive of customary loading charge, over price paid for said cotton seed." Rule governing 1918 crop issued July 1, 1918, given here; repealed May 31, 1919.)

B. SPECIAL REGULATIONS GOVERNING LICENSEES CRUSHING COTTON SEED, PEANUTS, SOYA BEANS, PALM KERNELS, OR COPRA, AND DEALERS AND BROKERS IN THE RESULTING OILS.

Rule 8. Commodities must be sold at not more than reasonable advance over cost.—The licensee shall sell the products of cotton seed, peanuts, and soya beans at not more than a reasonable advance over the average cost to the licensee of the cotton seed, peanuts, or soya beans from which such products are manufactured. A licensee who operates one or more cotton ginneries or crushing mills shall keep separate accounts and make reports to show separately the operations of each; for the purpose of this rule each cotton ginnery or crushing mill shall be considered as a unit and the licensee shall not be permitted to average any costs, profits, or losses between such units.

NOTE.—The United States Food Administration will divide the cotton-producing territory of the United States into zones, and it will determine and announce basic yields of oil, meal, linters, and hulls from cotton seed for each zone, and differentials or spreads to represent the difference between the price paid for cotton seed and the total amount any licensee engaged in the business of crushing cotton seed may receive from the sale of the manufactured products of the cotton seed. The licensee will be permitted to sell all manufactured products in excess of the basic yields without reference to the established margin, provided that the price charged for such excess products shall not exceed the average price that will be indicated for the other products in said yield. (Issued Nov. 1, 1917; repealed May 31, 1919.)

D. SPECIAL REGULATIONS GOVERNING REFINERS OF COTTONSEED OIL, PEANUT OIL, SOYA-BEAN OIL, PALM-KERNEL OIL, PALM OIL, AND COPRA OIL, AND DEALERS AND BROKERS IN SUCH REFINED OIL.

Rule 5. Domestic oil to be sold at reasonable advance over cost.—The licensee shall sell cottonseed oil, peanut oil manufactured from domestic peanuts, and soya-bean oil manufactured from domestic soya beans at not more than a reasonable advance over the average cost to licensee of the crude oil from which such oil was refined.¹ (The licensee may consider all refining plants operated by or controlled by such licensees as a single unit. Licensees who control mills crushing oleaginous materials must credit all raw materials obtained from such crushing mills at the same price at which they could purchase the same products in the open market at the time of transfer.) (Issued Jan. 28, 1918; repealed May 31, 1919.)

NOTE.—The United States Food Administration will indicate from time to time what margins it considers fair.

E. MANUFACTURERS AND DEALERS IN LARD SUBSTITUTES.

(Issued Jan. 28, 1918; repealed May 31, 1919.)

Rule 2. Licensees engaged in the manufacture and distribution of lard substitutes may consider all plants for the manufacture of lard substitutes operated by, belonging to, or controlled by the licensee as one unit for the purpose of determining costs and profits.

Rule 3. Licensees engaged in the manufacture of lard substitutes who own or control mills crushing cotton seed, peanuts, or other oleaginous materials must

¹ Issued July 1, 1918; repealed as to all except "cotton seed" Feb. 1, 1919.

credit all raw material obtained from such crushing mills at the same price at which they could purchase the same products in the open market at the time of transfer.

Rule 4. Licensees engaged in the manufacture of lard substitutes who own or control plants for the refining of vegetable oils must credit the refined oil received from said refining plants at the same price at which they could obtain the same product in the open market at the time of the transfer.

Rule 5. Every licensee who owns or controls a plant for the manufacturing of lard substitutes shall be subject to such differentials and spreads for the cost of manufacture of crude material into a finished product as may from time to time be determined and announced by the United States Food Administrator to return a fair profit to the licensee.

Rule 6. No manufacturer engaged in the manufacture of lard substitutes shall, without the written permission of the United States Food Administrator, sell or offer to sell lard substitutes at higher prices in one market than he is selling or offering to sell the same quality or brand in any other market on the same day. The price for sales in lots of 5,000 pounds or more, tierce basis, for delivery at one time, net after deducting all discounts and allowances, shall be taken as the basis in making comparisons for the purpose of this rule. In comparing with this the selling price of lots of less than 5,000 pounds, tierce basis, for delivery at one time, 1½ cents per pound will be deducted from the price actually charged. In comparing the price of package and case goods, stated differentials will be determined by the United States Food Administrator from time to time for all manufacturers of lard substitutes. (Issued Mar. 23, 1918.)

X. SPECIAL REGULATIONS GOVERNING MANUFACTURERS OF OLEOMARGARINE AND OTHER BUTTER SUBSTITUTES.

Rule 1 (effective Dec. 4, 1918). Maximum margins for manufacturers.—The manufacturer shall not sell oleomargarine or other butter substitutes at a greater average advance over the cost of the raw material (in any period of two months beginning Dec. 1) than the sum of his actual manufacturing cost plus a profit not to exceed 10 per cent of the selling price to the wholesale trade. In no case shall the manufacturing cost be figured in excess of \$6.30 per hundred pounds. (Repealed Jan. 26, 1919.)

Manufacturing costs shall include:

1. Labor.
 2. Selling expenses.
 3. Advertising.
 4. Administrative expenses.
 5. Depreciation.
 6. Taxes, not including excess-profits tax and income tax.
 7. Miscellaneous manufacturing expenses, not including interest charges.
- The cost of raw materials shall mean the cost, delivered, at plant of following:
- (a) Oils.
 - (b) Milk.
 - (c) Salt.
 - (d) Package.
 - (e) Color.
 - (f) Stamps.
 - (g) Cartons and paper.
 - (h) Supplies.

NOTE.—The Food Administration does not recognize \$6.30 per hundred pounds as a normal, reasonable cost of manufacture, nor 10 per cent net profit as a normal, reasonable net profit. These are maximum margins to cover the most expensive legitimate methods of operation.

XI. WHOLESALESA, JOBBERS, IMPORTERS, RETAILERS.

A. SPECIAL RULES APPLYING TO LICENSED NONPERISHABLE FOOD COMMODITIES.

Rule 5 (as amended Dec. 31, 1918). Must sell at reasonable advance over average purchase price.—The licensee, without regard to market or replacement value at the time of such sale, shall sell the following commodities at not more than a reasonable advance over the average purchase price of all lots of

the same grade and size of the same commodity in his possession or invoiced to him not contracted to be sold:

- Self-rising flour.

¹ Cleaned rice.

¹ Rice flour.

¹ Oleomargarine.

¹ Lard.

¹ Lard substitutes.

¹ Oleo oil.

¹ Cooking fats.

¹ Condensed, evaporated, or powdered milk.

¹ Canned or cured beef, pork, or mutton.

¹ Canned peas.

¹ Canned dried beans.

¹ Canned tomatoes.

¹ Canned corn.

¹ Canned salmon.

¹ Canned sardines.

¹ Dried prunes.

¹ Dried apples.

¹ Dried peaches.

¹ Dried raisins.

¹ Dried beans.

¹ Dried peas.

¹ Rye flour.

¹ Barley flour.

¹ Oatmeal.

¹ Rolled oats.

¹ Corn grits.

¹ Corn meal.

¹ Hominy.

¹ Corn flour.

¹ Cornstarch.

¹ Corn oil.

¹ Corn sirup.

¹ Glucose.

¹ Sirups.

¹ Molasses.

Maple sugar.

Maple compounds.

¹ Clarified, plantation - washed, and open-kettle sugars.

The licensee shall keep a record of the manner in which such average has been arrived at, and he shall take as the cost of all stock remaining on hand from lots already averaged the average cost previously arrived at.

In selling commodities not yet invoiced to him he shall sell at not more than a reasonable advance over the actual purchase price to him of all lots of the same grade and size of the same commodity purchased by him but not yet invoiced to him.

(This rule corresponds to special rules 1 and 2, series B, governing wholesalers and retailers. See special rules H, following, for green coffee.)

EXPLANATION.

NOTE.—This rule prohibits speculation in licensed commodities.
The following is an example of the method by which the average cost shall be determined, taking flour as an example:

	Barrels.	Cost per barrel.	Total.
Lot A-----	20	\$10. 50	\$210. 00
Lot B-----	30	11. 00	330. 00
Lot C-----	25	10. 75	268. 75
	75	-----	808. 75
Average cost per barrel-----			10. 78
Reasonable advance-----			. 50
			11. 28

Suppose that 35 barrels are then sold at \$11.28 and 15 barrels purchased at \$11. The calculation for further sales will then be made as follows:

	Barrels.	Cost per barrel.	Total.
Barrels remaining on hand from lot previously averaged-----	40	\$10. 78	\$431. 20
Lot D (new purchase)-----	15	11. 00	165. 00
	55	-----	596. 20
Average cost per barrel-----			10. 84
Reasonable advance-----			. 50
Selling price-----			11. 34

¹ Rule providing for sale of these commodities "at not more than reasonable advance over actual purchase price of particular goods sold," issued Nov. 1, 1917. Wheat flour and mixed flour and other commodities listed in rule issued June 15, 1918. Repealed as to wheat flour and mixed flour Dec. 31, 1918. Repealed as to all commodities, except lard and lard substitutes made from cotton seed, Jan. 10, 1919. Repealed as to lard Apr. 1, 1919. Repealed May 31, 1919, as to lard substitutes made from cotton seed.

Neither the Food Administration nor any other branch of the Government has prescribed uniform cost accounting systems for either wholesale or retail food distributors. The Government has not, therefore, indicated how the licensee, in dealing with a commodity covered by the reasonable profit rule, shall dispose of cartage, interest, or other special charges, but it does expressly forbid the employment of such charges with the purpose, or with the effect, of increasing the licensee's profit above his own reasonable pre-war level.

The licensee shall not, in calculating cost, include accruals or payments of Federal income, corporation or excess profits taxes.

A wholesaler who also does a retail business is not required to sell to both classes of customers at the same price; and a merchant, if he desires, may make prices in the case of cash sales, or sales upon which he does not have to perform the delivery service, different from his prices when credit is given or delivery made. The test is, Are the commodities being sold at not more than a reasonable advance over the average price.

Regarding special discounts to favored customers, see General License Regulations No. 1, rule 5, relating to discriminatory charges. If the consumer does not get the benefit of the discount and the retailer retains it in addition to his allowed profit, then the retailer is selling at an unreasonable advance. The giving of special discounts to favored customers by wholesalers at least tends to cause the wholesaler to sell to other customers at a greater advance than he would if no special discounts to favored customers were given. The United States Food Administration intends to scrutinize all transactions involving special discounts and rebates of every kind given by licensees.

Under Rule XI-A-5 the licensee is not required to average the purchase price of commodities of different brands that are of a proprietary nature, even though the grade and size are the same. He may average, however, if he desires. (Opinion A-108, July 23, 1918.)

A wholesaler or jobber in the commodities mentioned in rule A-5, Special License Regulations XI, who conducts branches in one or more localities should calculate his costs according to each locality and sell at not more than the maximum margins over delivered costs in each particular vicinity. (Opinion A-117, Aug. 26, 1918.)

The Food Administration has determined, after careful consideration, that it will at present issue no regulations prohibiting the sale of foodstuffs at less than cost. Action will be taken, however, in cases where wholesalers or retailers are selling licensed foods at less than their purchase price plus railroad transportation charges, with the result of stimulating the consumption of such foodstuffs and increasing the margin which the dealer can charge for other goods. Each case will be considered on its individual merits. It is considered most inadvisable to attempt to limit sales at less than "cost," as ordinarily defined in business, because of the difficulty of calculating overhead expense per unit. The purchase price forms a simple test where the other elements of stimulating consumption and increasing profits in other licensed foodstuffs are present.

It has been pointed out that there are many instances in which dealers may be compelled by the condition of the market or of the goods to sell at considerably less than cost, especially in the case of perishables, and the Food Administration does not regard the practice in such case as unfair (Oct. 10, 1918).

MAXIMUM MARGINS ON SALES BY WHOLESALERS TO RETAILERS.

Commodities.	Maximum margins.
Sugar.....	15-35 cents per 100 pounds.
Wheat flour.....	50-75 cents per barrel.
Lard, lard substitutes, bulk (packages of 50 pounds or over)....	1½-2 cents per pound.
Standard hams, bacon.....	1-2 cents per pound.
All flours (except wheat).....	8-10 per cent.
Lard and lard substitutes, in packages (less than 50 pounds)....	
Condensed, evaporated milk.....	
Blackstrap molasses in barrels.....	10-12½ per cent.
Rice, hominy, grits, oatmeal, rolled oats, corn meal, beans, in bulk (packages of 25 pounds or over).....	
Rice, corn meal, hominy, grits, oatmeal, self-rising and prepared flour, and rolled oats, all in packages.....	
Corn oil, corn sirup, sugarhouse sirup, mixed sugar and corn sirup, and cottonseed oil.....	12-15 per cent.
Standard and extra standard licensed canned peas, tomatoes, corn, and canned dried beans, and pink, chum, and red salmon, and all domestic sardines.....	
All licensed dried prunes, apples, peaches, raisins.....	

NOTE.—Percentages should be figured on the wholesaler's selling price. The maximum margin on sugar has been increased to 35 cents per 100 pounds for wholesale grocers and food jobbers who actually perform, as to substantially all the sugar handled by them, the functions of buying, warehousing, selling, and distributing. But this maximum margin is not allowed where such service is not performed. Margins for sugar dealers

are not changed. Rye flour has been transferred to the 8-10 per cent classification. Prepared flours, sugarhouse sirup, and mixed sugar and corn sirup, have been placed in the 12-15 per cent classification. All domestic sardines and all grades of licensed dried fruits are now included within the 12-15 per cent classification.

Any gross margins above delivered cost upon sales in unbroken cases to retailers in excess of the foregoing margins will be regarded as prima facie evidence of a violation of the statute and the regulations.

In case the licensee breaks original packages he may add to his cost the actual cost of such repacking, in no case to exceed 5 per cent.

It should be noted that the above differentials are maximum margins, which must not be exceeded by the wholesaler.

Licensed commodities not covered by the above margins shall not be sold at a margin above delivered cost to the wholesaler—average purchase price plus freight to public railway terminal in jobber's city or town—of the particular goods sold which will yield any greater profit than the dealer customarily enjoyed on the same commodity in the prewar period on an even market under freely competitive conditions.

High margins, even if customary during prewar period, are not justifiable now. Unreasonable margins are not excused by lower margins on other transactions in the same commodity or in other commodities.

The margins named are ample to include all ordinary carrying charges. If general conditions should later necessitate the carrying of goods for a longer period than usual, further consideration will be given to this feature. In determining the cost of dried fruit, the licensee may add to his purchase price not more than one-eighth cent per pound per month on dried fruit actually carried in cold storage between May 1 and November 1, not to exceed three-fourths cent per pound, on any particular lot of goods.

Any change from the prewar custom in cash discount terms, cartage, or other charges, which tends to or results in increasing the margin of profit allowed, will be dealt with as an unfair practice.

WHAT REALES ARE JUSTIFIABLE.

(The following applies to all licenses governed by the rules contained in this pamphlet.)

General rule 6 reads as follows: "The licensee, in selling food commodities, shall keep such commodities moving to the consumer in as direct a line as practicable and without unreasonable delay. Resales within the same trade without reasonable justification, especially if tending to result in a higher market price to the retailer or consumer, will be dealt with as an unfair practice."

Service.—Any transactions that savor of trading in which a profit accrues to the dealer without corresponding service, are clear violations of the rule and will subject the offender to revocation of his license and to such other penalty as the law provides. A resale that is in keeping with one of the following principles will be considered lawful under general rule 6:

A. *Continuous service.*—The seller may customarily and continuously serve in less than carload lots wholesale grocers who are serving retail grocers, but who are unable for some sufficient and legitimate reason to purchase direct from the source of supply.

B. *Carload buying.*—A wholesaler or jobber may enjoy the benefit of carload rates from distant points and sell to smaller wholesale grocers who are unable to buy the commodity in carload lots.

C. *Warehousing.*—A wholesaler or jobber may continuously and customarily furnish cold storage or other warehousing service and sell to wholesale grocers who have not adequate facilities of that character.

D. *Surplus stocks.*—A wholesaler may dispose of surplus stocks bought, not for speculation, but in good faith for the reasonably anticipated requirements of his business under the rules and regulations and which he finds himself unable to dispose of to his regular customers. The fact that such goods have not been warehoused by such wholesaler will be regarded as prima facie evidence that they were not bought in good faith.

Only one resale permitted.—The distributor who purchases from a wholesaler or jobber must not, under any circumstances, resell the goods in question to a wholesaler or jobber, but must distribute directly to retailers or consumers.

MAXIMUM MARGINS ON REALES JUSTIFIED BY PERFORMANCE OF ACTUAL SERVICE SPECIFIED IN A, B, C, AND D, ABOVE.

1. *Seller's margins.*—The margin of profit enjoyed by the wholesaler or jobber selling to another wholesaler or jobber shall in no case exceed one-half of the maximum margin named for the particular commodity in the wholesaler's list above. These margins shall include all cartage, storage, interest, and other charges.

2. *Purchaser's margins.*—The distributor who has thus purchased within the trade shall sell the goods so purchased at not more than the lower margin indicated in the list above.

MAXIMUM MARGIN ON OTHER REALES.

3. On all other resales, such as accommodation sales, commonly known in the trade as "pick-ups," only one wholesale profit (as indicated by the above maximum margins) is allowed, but this one allowable profit may be divided between the wholesalers as they determine.

MARGINS FOR CLEAN RICE DEALERS IN SELLING TO WHOLESALERS.

(As amended Nov. 25, 1918.)

Where a rice dealer's business was established prior to August 10, 1917, the Food Administration will permit one such dealer to handle rice between the miller and the wholesale grocer, but no resale of rice between such dealers will be permitted. Except in the case of such established business, it is considered that rice should be on the same basis as other manufactured cereal products so far as resale within the trade is concerned. All sales of rice made through any distributing company in which the mill is interested must be made at the original mill price except as specifically provided below for millers' selling agencies.

Sales by established dealers referred to above at margins over cost greater than the following maximum margins will be considered a violation of the regulations:

MAXIMUM MARGINS.

1. Carload lots, including mixed cars, shipment direct from mill or reconsigned without unloading—not to exceed 2½ per cent.
2. Pooled cars, shipment direct from mill or reconsigned without unloading—not to exceed 4 per cent.
3. Carload lots, including mixed cars, where dealer unloads and handles through a warehouse—not to exceed 4 per cent.
4. Less than car lots, including pooled cars, where dealer unloads and handles through a warehouse—not to exceed 6½ per cent.

In the first three cases mentioned any wholesale grocer buying from a dealer may take the same margin as if he had bought direct from the mill. In the fourth case the wholesaler is limited to a 10 per cent margin and may not resell to another wholesaler.

MILLERS' SELLING AGENCIES.

A company acting as a dealer which was established prior to August 10, 1917, may carry on its own business in accordance with the margins indicated above, although it is owned or controlled by a rice miller, provided that no larger proportion of rice is sold by the miller through such company than the average proportion so sold during the next three preceding years.

Where a miller maintains a branch office which receives rice in car lots on consignments from the mill, warehouses this rice, and distributes it in less than car lots to wholesale grocers, such branch office shall be permitted to add to the miller's maximum prices not more than 3 per cent for the service performed, provided that no larger proportion of the mill's product is thus sold through such branch house than the average proportion so sold during the next three preceding years.

NOTE.—Where a selling company owned or controlled by a miller sells directly to retailers in less than car lots, it may add a margin not greater than that added by other licensees performing similar services.

(New, Nov. 16, 1918.) The maximum margin of from 8 to 10 per cent upon the sale of condensed evaporated milk does not apply to such milk when packed in barrels.

NORM.—Resales of cornstarch.—Issued October 31, 1918. The attention of the Food Administration has been called to speculation and intertrading in bulk cornstarch. Attention is called to the fact that the resale regulations applying to wholesalers of other groceries apply in full to cornstarch in bulk or in packages (see Rule XI-A-5' Note). Under general rule 6 the Food Administration considers that a dealer in cornstarch should only sell cornstarch:

1. To a manufacturer using cornstarch in his manufacture (including confectioners and bakers).
2. To retail grocers and consumers.
3. To smaller wholesale grocers under one of the following circumstances:
 - A. *Continuous service.*—The dealer may customarily and continuously serve in less-than-carload lots wholesale grocers who are serving retail grocers but who are unable for some sufficient and legitimate reason to purchase direct from the source of supply.
 - B. *Carload buying.*—A dealer may enjoy the benefit of carload rates from distant points and sell to smaller wholesale grocers who are unable to buy the commodity in carload lots.
 - C. *Warehousing.*—A dealer may continuously and customarily furnish cold storage or other warehousing service and sell to wholesale grocers who have not adequate facilities of that character.
 - D. *Surplus stocks.*—A dealer may dispose of surplus stocks bought, not for speculation, but in good faith for the reasonably anticipated requirements of his business under the rules and regulations and which he finds himself unable to dispose of to his regular customers. The fact that such goods have not been warehoused by such dealer will be regarded as prima facie evidence that they were not bought in good faith.

Where cornstarch is used by manufacturers in any quantity there should be not more than one dealer between the cornstarch manufacturer and the manufacturer using corn-

starch. The greater number of such sales should be made direct without the interposition of any dealer. No manufacturer who purchases cornstarch can resell the same without the written permission of the United States Food Administrator, which will be given in proper cases on the condition that the purchaser is not required to pay a total margin over the cornstarch manufacturer's price greater than that permitted to a single dealer plus actual freight.

Margins and profits.—Under Rule XI-A-5 the Food Administration will consider any gross margins above delivered cost in excess of those listed below as prima facie evidence of a violation of the statute and regulations, and cause for revocation of a dealer's license.

A. Where cornstarch is sold in car lots without warehousing, not to exceed 4 per cent.

B. Where cornstarch is sold in less than car lots to bakers, mixers, manufacturers, or retailers, not to exceed 8 to 10 per cent in bulk or barrels, not to exceed 12 to 15 per cent in packages.

C. Where cornstarch is sold to a smaller wholesale grocer under the resale provisions given above in less than car lots, not to exceed 7½ per cent in bulk.

D. Where the dealer breaks original packages he may add to his cost the cost of the new package plus actual cost of repacking, in no case to exceed 5 per cent.

Sale of lard substitutes.—The following ruling has been made by the law department in reply to an inquiry regarding jobbers' margins on lard substitute:

"We beg to acknowledge your letter of September 28 in which you inquire whether it is against the Food Administration regulations for a wholesale jobber to sell lard substitute at less than 24½ cents, tierce basis, which under the stabilized program he purchases at 23 cents. The Food Administration regulations provide a maximum margin for the wholesaler of 1½ to 2 cents per pound over the purchase price delivered at railroad station. A general stabilization program affecting lard substitutes and other cottonseed products has now been adopted by the Food Administration for the purpose of eliminating speculation and reducing the margin between the producer of cotton seed and the consumer of lard substitutes, and this program has been approved by representatives of all interests concerned, who have expressed their desire to cooperate. In view of the circumstances surrounding this program, it will hereafter be considered an unfair practice for any jobber to sell lard substitutes or lard compound in lots of less than 5,000 pounds at a margin over his delivered purchase price less than 1½ cents or 1½ cents where the jobber purchases in lots of 30,000 pounds or more and receives a concession of ½ cent.

"It should be pointed out that this action rests solely on the peculiar circumstances surrounding the cottonseed program. The reasons applying to lard substitutes do not apply to any other commodity handled by wholesale grocers; and the policy of the Food Administration and its distribution division is decidedly opposed to the application of any similar principle to other commodities.

"It should further be pointed out that the 2 cent maximum margin for jobbers applies on the actual purchase price. The jobber who purchases in lots of 30,000 pounds at 22½ cents must sell at not to exceed 24½ cents."

The maximum margins permitted on sales of nonperishables by wholesalers to retailers prescribed in the announcement of June 6, 1918, and in the note to Rule XI-A-5 include local cartage, but does not include delivery charges incurred by the wholesaler in delivering by truck to points to which shipment might be made by rail. The actual expense of making such deliveries by truck may be charged by the seller to the parties to whom the sale is made after the price has been fixed by the seller in conformity with said rule A-5 and announcement of June 6. In no case, however, shall the added charge be in excess of the freight charge. (Opinion A-113, July 26, 1918.)

A brokerage may be paid to a broker in a permissible resale from one jobber or wholesaler to another; the brokerage must, however, be deducted from the profit of either the buyer or seller so that the price of goods in the course of further distribution shall not bear such brokerage. (Opinion A-118, Aug. 26, 1918.)

MAXIMUM MARGINS ON SALES BY RETAILERS TO CONSUMERS.

(Issued Nov. 7, 1918.)

The Food Administration has determined that any sales of food commodities at a gross margin above delivered cost in excess of those indicated below are unreasonable, and will be regarded as prima facie evidence of a violation of the statute and of the above regulation. Percentage may be calculated on the selling price. Delivered cost shall mean the cost at the railroad, steamboat, or other terminal in the retailer's town. Where the retailer is not located in a railroad or steamboat town he may include any hauling charge in the delivered cost.

The lesser margin indicated is not a minimum margin, but is a maximum margin for those whose cost of doing business is less, such as stores which do not perform the services of credit and delivery. Any change from the prewar practice in cash discount terms or other changes which tend to or result in increasing the margin of profit allowed will be dealt with as an unfair practice.

The retailer may have the benefit of fractional costs on each transaction; that is, he may calculate the total charge to a customer on any transaction as if fractional costs were not allowed, and if the result is a fraction, he may add thereto such fraction of a cent as may be necessary to make a price in even cents. The following table gives an example in the case of eggs, using the cash and carry margin of 7 cents per dozen:

Amount of sale.	Cost.	Margin (cents).	Total.	Fraction added.	Maximum selling price.
1 dozen.....	\$0.46½	7	\$0.53½	1	\$0.54
2 dozen.....	.92½	14	1.06½	2	1.07
3 dozen.....	1.38½	21	1.59½	3	1.60

MAXIMUM MARGINS.

Barley flour, original mill packages.....	18 to 22 per cent.
Barley flour, broken mill packages.....	0.01½ per pound.
Rye flour, original mill packages.....	18 to 22 per cent.
Rye flour, broken mill packages.....	0.01½ per pound.
Corn flour, original mill packages.....	18 to 22 per cent.
Corn flour, broken mill packages.....	0.01½ per pound.
Rice flour.....	18 to 22 per cent.
Corn meal, bulk.....	0.01½ per pound.
Corn meal, original mill packages.....	18 to 22 per cent.
Hominy.....	18 to 22 per cent.
Sugar, all kinds in bulk.....	0.01½ per pound.
Sugar, all kinds in refiners' original packages.....	0.01 per pound.
Evaporated milk, unsweetened.....	18 to 22 per cent.
Oatmeal and rolled oats, bulk.....	0.01½ per pound.
Oatmeal and rolled oats, original mill packages.....	20 to 25 per cent.
Rice.....	20 to 25 per cent.
Beans, white or colored.....	20 to 25 per cent.
Starch, edible.....	20 to 25 per cent.
Corn sirup, tins.....	20 to 25 per cent.
Canned corn, peas, and tomatoes, standard grades.....	25 to 30 per cent.
Canned salmon chums, pink, and red.....	25 to 30 per cent.
Canned sardines, domestic.....	25 to 30 per cent.
Dried fruit, raisins, prunes, and peaches.....	25 to 30 per cent.
Lard, pure leaf, bulk.....	5 to 6 cents per pound.
Lard, pure leaf, tins.....	18 to 22 per cent.
Lard, substitutes, bulk.....	5 to 6 cents per pound.
Lard, substitutes, tins.....	18 to 22 per cent.
Breakfast bacon, whole pieces.....	6 to 7 cents per pound.
Heavy bacon, whole pieces.....	5 to 6 cents per pound.
Hams, smoked, whole.....	6 to 7 cents per pound.

In quoting sliced ham and bacon add usual differential to cover actual shrinkage.

"Original mill packages" as used above means where retailer sells product in the same mill container as received by him.

"Broken mill packages" means when retailer removes contents from original packages and sells in smaller quantities.

By other special regulations the retailer's maximum margins have also been fixed in accordance with the following list:

Potatoes, white or Irish.....	25 to 30 per cent.
Onions.....	25 to 30 per cent.
Eggs (whether sold in carton or not).....	7 to 8 cents per dozen.
Cold-storage butter.....	6 to 7 cents per pound.
Butter substitutes, oleomargarine, nutmargarine, etc.....	5 to 6 cents per pound.

NOTE.—The maximum margins on wheat flour and mixed flour were removed December 31, 1918.

B. REFINED SUGAR.

Rule 1. Profit on sugar purchased from refiner.—No wholesale dealer in refined sugar who purchases such sugar from the producer or refiner, direct or through a broker, shall sell such sugar at an advance over the refiner's list price at which he purchased sugar greater than the normal margin charged by wholesale dealers in refined sugar in the same locality, or such margin as may hereafter be established by the Food Administration. (Issued Nov. 1, 1917; repealed Feb. 1, 1919.)

(This rule corresponds to special rule 1, series B, Governing Wholesale Dealers in Sugar.)

NOTE.—This rule applies to plantation granulated sugar.

Rule 2. Profit on sugar obtained from other than refiner.—It will be considered an unreasonable practice if two or more wholesale dealers handle the same sugar at a greater total margin than that prescribed by rule 1. No wholesale dealer or other licensee who purchases refined sugar from any person other than the producer or refiner shall sell such sugar to a retailer or to a person using such sugar in manufacturing at a price representing an advance over the producer's or refiner's list price on the day of such sale greater than the advance allowed by the preceding rule to a wholesale dealer in the locality where such sale occurs. (Issued Nov. 1, 1917; added to June 15, 1918; repealed Feb. 1, 1919.)

(This rule corresponds to special rule 2, series B, Governing Wholesale Dealers in Sugar.)

Rule 3. Retail sales must be made at not more than reasonable advance over cost.—The licensee shall sell sugar at retail at not more than a reasonable advance over the actual purchase price of the particular goods sold, without regard to the market or replacement value at the time of such sale. (Issued Nov. 1, 1917; repealed Feb. 1, 1919.)

E. DRIED BEANS AND DRIED PEAS.

Rule 1 (as amended July 24, 1918). Future dealing in new crop beans prohibited.—The licensee shall not buy or sell new crop dried beans except for seed, or for the Federal, State, county, or municipal governments or for the Government of any nation at war with Germany, before September 1 of the year covering such new crop if grown in the United States of America, Japan, Manchuria, China, or Asiatic countries, or before June 1 if grown in South America, Porto Rico, or Mexico. (Rule issued Nov. 1, 1917, limited dealing in beans grown in the United States changed July 24, 1918, to include beans grown in countries noted here; repealed Dec. 3, 1918.)

NOTE.—This rule does not prohibit a licensee from guaranteeing a certain price for a crop to be planted; however, sales against such an arrangement can not be made before September 1.

Rule 2 (as amended July 24, 1918). Future dealing in new crop peas prohibited.—The licensee shall not buy or sell new crop dried peas grown in the United States of America, Japan, Manchuria, China, or Asiatic countries, except for seed, or for the Federal, State, county, or municipal governments or for the Government of any nation at war with Germany, before July 1 of the year covering such new crop. If grown in South America, Porto Rico, or Mexico such new crop shall not be sold before April 1. (Rule issued Nov. 1, 1917, limited dealing in peas grown in the United States, changed July 24, 1918, to include peas grown in countries noted here; repealed Dec. 3, 1918.)

NOTE.—While this rule permits the guaranteeing of a price for a crop, no sales can be made by the licensee before July 1.

MAXIMUM MARGINS.

Under Special Rule XI-A-5 speculation in dried beans or dried peas is prohibited.

(Effective Aug. 20, 1918.) The Food Administration will regard any sales of dried beans or dried peas at a gross margin above delivered cost (purchase price plus freight) in excess of the margins indicated in the following table as prima facie evidence of a violation of the statute and the rules.

These margins are guides only. They do not change the rules. The margins of profit are still limited to a reasonable advance over the average purchase price of the goods sold without regard to the market or replacement value, and a smaller margin may be considered reasonable where the licensee has a lower cost than customary by reason of his failure to perform any part of the services customarily performed by dealers of that class.

High margins, even if customary during prewar periods, are not justifiable now. Unreasonable margins are not excused by lower margins on other transactions in the same commodity or in other commodities.

Class.	Services rendered.	Maximum margin.	Interpretations.
1. Importer.....	Furnishes letter of credit and buys direct for import.	<i>Per cent.</i> 10	Importers who buy on c. i. f. terms or bank guarantee of payment after arrival of shipment, or who do not assume the direct risk of buying in foreign countries, fall in class 3 and are entitled only to maximum margin of profit for that class.
2. Elevator or cleaning warehouse.	Buys from grower, elevates, cleans, handpicks, and sacks.	12	The difference between the selling price and the actual cost on a handpicked or recleaned basis should be used in arriving at these margins.
	Buys from grower, elevates, recleans and sacks; does not handpick.	10	These margins have been determined by taking the average cost and expense of operating in different sections of the country.
3. Bean factor.....	Buys from retail elevator (or importer) and finances to destination.	5	Elevators and warehouses which buy as agents for larger concerns and do not prepare for the market, are not entitled to more than a reasonable commission for the services rendered, which must be included in the allowed margin of his principal.
	Buys from grower and has recleaned by railroad or public warehouse.	7	

WHAT RESALES ARE JUSTIFIABLE.

General rule 6.—The licensee in selling food commodities, shall keep such commodities moving to the consumer in as direct line as practicable and without unreasonable delay. Resales within the same trade without reasonable justification, especially if tending to result in a higher market price to the retailer or consumer, will be dealt with as an unfair practice.

Service.—Any transactions that savor of trading in which a profit accrues to the dealer without corresponding service are clear violations of the rule and will subject the offender to revocation of this license and to such other penalty as the law provides.

The handling of dried beans and dried peas by wholesale grocers, including those sometimes referred to as "bean jobbers" when such jobbers are not located in the bean-producing sections, and do not buy from or finance retail elevators, is dealt with in the circular of June 6, 1918, on "Maximum margins on sales by wholesalers to retailers and by merchandise brokers; and justifiable resales for such dealers." The contents of this circular are also to be found in the note to Rule XI-A-5, effective June 15. The provisions regarding importers of beans in the circular of June 6 are superseded by this circular.

Resales between bean factors, commonly known as bean jobbers, located in the bean-producing sections who buy from the retail elevators and finance such stock to destination are prohibited unless the sum of the gross profits obtained by such factors does not exceed the maximum reasonable profit for that group.

Resales between elevators or cleaning warehouses are also prohibited unless the sum of the gross profits obtained by such warehouse does not exceed the maximum reasonable profit for that group.

Elevators and importers may resell to bean factors, but the effect of the resale rule is:

(1) That imported beans shall in no event reach the wholesaler or merchandise broker class dealt with in the circular of June 6 at an advance of more than 5 per cent over the price received by the importer, plus freight.

(2) That domestic beans shall reach the wholesaler or merchandise broker class dealt with in the circular of June 6 at an advance of not more than 5 per cent (or 7 per cent as the case may be), plus freight, over the price received by the elevator.

It may be noted that by the provisions of the circular of June 6, after the beans reach the wholesale grocery or merchandise broker class, they must be sold direct to retailers, except in certain specified cases where one resale at a small margin is permitted.

F. DRIED FRUITS.

Rule 1. New-crop fruits that are not available for spot delivery not to be bought or sold before July 15.—The licensee, prior to July 15 of the year in

which new-crop fruits are to be grown and packed, shall not buy, contract to buy, offer for sale, or have outstanding any contract of sale or any commitment for sale of new-crop fruits not available for spot delivery. A commitment shall include all tentative or conditional orders whether definite prices are named or not. (Rule issued Mar. 30, 1918, forbade dealing in dried fruits before May 1 of year grown. Time changed to June 1, Apr. 30, 1918; changed to July 15, May 24, 1918; canceled Jan. 10, 1919.)

NOTE.—This rule and the following rule correspond to rules 4 and 5, series B, Supplement 28, which became effective May 7, 1918, and were amended to their present form May 24, 1918.

G. CANNED PEAS, CANNED CORN, CANNED TOMATOES, CANNED SALMON, AND CANNED SARDINES.

Rule 1. Canned goods not to be quoted before February 1—The licensee shall not quote for future delivery any canned peas, canned corn, canned tomatoes, canned salmon, or canned sardines before February 1 of the year when such products are to be canned. (Issued Dec. 20, 1917; canceled Jan. 10, 1919.)

(This rule corresponds to special rule 3, series B, governing wholesalers and retailers.)

H. GREEN COFFEE.

Rule 1 (as amended Dec. 5, 1918). Licensees entitled to reasonable profit.—Licensees in selling coffee, which is owned by any licensee, spot or afloat, on or before December 15, 1918, shall not take more than a reasonable profit over the cost of the particular coffee sold, provided that any sale of spot coffee shall be made at not more than a reasonable profit over the average cost of his entire stock of spot coffee. Each growth of coffee shall be averaged separately. Every invoice or contract covering the sale of coffee subject to this rule shall be marked:

“The seller of the coffee covered by this invoice or contract hereby certifies that same has been sold subject to special rules 1, 2, and 3 of the Food Administration.”

The licensee in arriving at the cost of such coffee shall include any gain or loss resulting from any actual hedging transaction on a coffee exchange. For the purpose of this rule, an actual hedging transaction on a coffee exchange shall only include transactions in which the sale or purchase made is finally closed or offset.

In calculating the profit permitted by this rule the licensee shall not include the gain or loss from more than one hedging transaction on the same lot or stock of coffee, but the position of this transaction may be switched from one month to another, provided that all profits or losses from any hedging transaction and all facts regarding the switching of any hedge from one month to another are included in the licensee's reports.

The licensee shall keep any speculative account of the coffee exchange entirely separate from such hedging transactions, and the gain or loss resulting therefrom shall not be considered in determining the cost of his hedged stock of coffee. (First issued Feb. 7, 1918; amended June 15 to define hedging transaction more in detail; amended July 24 and Sept. 11 with reference to coffee which might be averaged in figuring cost. Canceled Jan. 10, 1919.)

NORM.—The above rule applies only to coffee owned by any licensee, spot or afloat, on or before December 15, 1918.

Rule 2 (as amended July 24, 1918). Importer limited to profit of 5 per cent.—For the purpose of rule 1 a reasonable profit for an importer shall not exceed 5 per cent gross margin over cost, plus any brokerage or commission actually paid, and the usual ex ship or in store, and shipping charges actually incurred by the licensee on such coffee. If drafts against purchase are drawn in pounds sterling, only the actual amount paid shall be used in figuring the cost.

For the purposes of this rule, an importer is one who buys coffee in the country of origin, or coffee in transit to this country, irrespective of terms or conditions of delivery, and who resells such purchase as shipped, in any position, as a whole or in divided quantities without selection of specified chops. A jobber dealing in the foregoing manner shall be considered an importer. (Issued Mar. 9, 1918, limiting profit to 2½ per cent; amended July 24, 1918,

limiting profit to 5 per cent; made to apply only to coffee owned by licensee on or before Dec. 15, 1918, by note added Dec. 5, 1918; canceled Jan. 10, 1919.)

NOTE.—An importer's transaction is one in which an invoice is sold practically as shipped. For example, a sale of 450 bags, more or less, out of an invoice of 500 bags, in order to enable the seller to obtain the profit allowed to jobbers, will be considered as a violation of the regulations.

Rule 3 (as amended July 24, 1918). Jobber limited to profit of 7½ per cent.—For the purposes of rule 1 a reasonable profit for a jobber shall be 7½ per cent gross margin over cost, such cost and charges to be computed as prescribed in rule 2. A jobber, for the purpose of this rule, is one who customarily sells coffee in one or more chops to wholesalers, roasters, or other licensed green-coffee dealers. (Issued Mar. 9, 1918, limiting profit to 5 per cent; amended July 24, 1918, limiting profit to 7½ per cent, made to apply only to coffee owned by licensee on or before Dec. 15, 1918, by note added Dec. 5, 1918; canceled Jan. 10, 1919.)

NOTE.—The prescribed margin of profit does not apply to sales of 25 bags or less.

Rule 4 (as amended July 24, 1918). Resales, with certain exceptions, forbidden.—The licensee in selling green coffee shall keep it moving to the consumer in as direct a line as practicable and without unreasonable delay. Resales, especially if tending to result in a higher market price to the consumer, will be dealt with as an unfair practice. One resale from one importer to another is permissible, and on such resale the gross margin of profit shall not exceed 2½ per cent over cost plus such charges as are stated in rule 2. One resale from one jobber to another is permissible, and on such resale the gross margin shall not exceed 3½ per cent over cost plus such charges as are stated in rule 2. (Issued Mar. 9, 1918, limiting profit in sales between importers to 1½ per cent and between jobbers to 2½ per cent; changed July 24, 1918, to 2½ per cent for importers and 3½ per cent for jobbers; made to apply only to coffee owned by licensee on or before Dec. 15, 1918; added Dec. 5, 1918; canceled Jan. 10, 1919.)

NOTE.—More than one resale will be permitted only under very exceptional conditions. The Food Administration realizes that conditions may arise where sufficient justification may be found to warrant further resales. Such resales, however, can only be made with the permission of the Food Administration. Full consideration for the issuing of such permission will be given when sufficient justification can be shown.

Rule 7. Must not charge more than the customary brokerage.—The licensee shall not charge, directly or indirectly, a commission or brokerage on the sale of green coffee in excess of that which ordinarily and customarily prevails, under normal conditions, in the locality in which the broker's business is conducted. (Issued Mar. 9, 1918; canceled Jan. 10, 1919.)

Rule 8. Only one brokerage permitted.—Brokers shall not receive more than one brokerage on any sale, nor shall they receive an overage except where by force of circumstances they may have become principals through a misunderstanding or delay. When a broker closes out or sells coffee upon which he receives an overage he must send to the buyer, and enter in his reports to the Food Administration, full particulars regarding such transaction. In cases where first-hand dealers (i. e., importers, jobbers, or licensees holding green coffee on commission) employ one broker as their exclusive broker, and such goods are placed to the interior trade through a local broker acting there as the representative of the sole broker of the principal, the licensee under rules 2, 3, and 4 may include under the item of brokerage such extra brokerage or commission as has been heretofore customary for the local broker. All invoices rendered by licensees to buyers of green coffee shall state the entire amount of brokerage paid, if any, on the transaction, and included in the price paid by the buyer. (Issued Mar. 9, 1918; canceled Jan. 10, 1919.)

NOTE.—In the green-coffee trade it has been customary for brokers, representing exclusively first-hand dealers, to handle these accounts through outside brokers for the interior trade, and these first-hand dealers cover the cost to them of these outside brokers by an additional price, secured from the purchaser. As this custom has been long established, the Food Administration, pending further notice, will permit it to continue, but requires that the full amount of all commissions paid on a transaction shall be shown on the coffee invoices rendered by the seller to the buyer in every case.

ROASTED COFFEE.

Although roasted coffee itself has not been licensed, it must be carefully noted that all persons selling roasted coffee are subject to the food-control act of August 10, 1917, and that this law expressly forbids unreasonable or exces-

sive charges. If it is found that the trade is violating this law as to reasonable profits upon roasted coffee, prompt action will be taken and the Food Administration will also find it necessary to place roasted coffee under license.

J. SPECIAL REGULATIONS GOVERNING DISTRIBUTORS OF OLEOMARGARINE OR OTHER BUTTER SUBSTITUTES.

Rule 1 (new, Oct. 25, 1918). Oleomargarine must not be sold at retail at more than reasonable advance over cost.—The licensee dealing in oleomargarine or other butter substitutes at retail shall not sell at more than a reasonable advance over cost without regard to market or replacement value at the time of sale. Cost shall include purchase price plus transportation charges, if any. The licensee may average the cost of all oleomargarine or other butter substitutes of the same kind and grade in his possession at the point from which the sale is made which has not already been contracted to be sold, and may take such average cost as the cost of any particular lot. When new lots are added and a new average calculated the licensee shall include in the new averaging all stock remaining on hand of lots already averaged at the average cost of such lots previously determined. If the cost of any oleomargarine or butter substitutes is averaged the cost of all such products must be averaged. When costs are averaged the licensee must keep a record of the manner in which such average has been arrived at. (Repealed Feb. 1, 1919.)

NOTE.—The United States Food Administration will regard any advance in excess of 5 cents to 6 cents per pound over cost as unreasonable and as evidence of violation of the above rule. The 5 cents per pound represents the maximum margin for stores conducted on the cash and carry or no service plan, while 6 cents per pound is the maximum margin for the extra service stores extending credit and delivery.

In determining margins at 5 cents and 6 cents per pound on oleomargarine with the fractional costs in favor of the dealer, the United States Food Administration has given due consideration to the rising costs of operation which must be met by the dealer.

Retailer may have benefit of fractional cost on any transaction.—Retailers whose delivered terminal costs figure in fractions may have the benefit of such fractional costs. For example, if oleomargarine costs at terminal delivery 32½ cents per pound, the selling price may be figured as follows:

CASH AND CARRY STORES.

Amount of sale.	Cost.	Margin.	Total.	Fraction added.	Maximum selling price.
	Cents.	Cents.	Cents.	Cents.	Cents.
1 pound.....	32½	5	37½	¼	38
2 pounds.....	65	10	75	None.	75
3 pounds.....	97½	15	112½	¼	113

The maximum selling price for the extra service or credit and delivery stores would be 1 cent per pound higher.

Rule 2 (new, Oct. 17, 1918). The manufacture and sale of prints of oleomargarine or other butter substitutes weighing less than 1 pound prohibited.—On and after January 1, 1919, no licensee shall manufacture or sell units of oleomargarine or any other butter substitute in print form that weighs less than one pound, provided that this rule shall not prevent a retailer from cutting a unit weighing 1 pound or more, and selling a portion thereof to a consumer. (Repealed Nov. 25, 1918.)

L. CLEAN RICE.

Rule 2. Quotations of imported clean rice by the pound only.—The licensee shall quote, buy, and sell all imported clean rice by the pound only. (Repealed Feb. 1, 1919.)

NOTE.—This rule applies to imported clean rice which is held for export.

XII. BROKERS AND AUCTIONEERS OF LICENSED NONPERISHABLE FOOD COMMODITIES.

A broker or auctioneer in a transaction concerning any licensed food commodity is responsible for any violation by the principal of the regulations governing such transaction. Brokers and auctioneers should, therefore, familiarize themselves with the general regulations and any special regulations governing principals for whom they act.

A list of the special rules issued will be found on page 3 of Pamphlet No. 1 (General License Regulations).

Brokers and auctioneers in all licensed nonperishable food commodities must also conform to the following brokers' rules:

Rule 1. Commission or brokerage charges limited.—A licensee shall not charge directly or indirectly a commission or brokerage on the sale of food commodities in excess of that which ordinarily and customarily prevails under normal conditions in the locality in which the broker's, commission merchant's, or auctioneer's business is conducted and in the particular branch of trade in question.

Rule 2. Prompt remittance required.—The licensee shall remit promptly following the sale of food commodities received on consignment for sale or distribution, and shall render to the consignor an account showing the true sales and with charges only for services actually performed and expenses actually incurred by the licensee. (Issued Nov. 1, 1917, repealed Feb. 1, 1919.)

NOTE.—A commission merchant can not divide his commission with the buyer unless he shows on the account of sales rendered to the consignor that he has done so.

Rule 3. Charging of both brokerage and overage prohibited.—The licensee shall not charge or receive for himself, on the sale of any food commodities, both a commission or brokerage and an overage or profit. (Issued Nov. 1, 1917; repealed Feb. 1, 1919.)

Rule 4. Sales to self forbidden without written consent of principal.—The licensee shall not directly or indirectly sell consigned food commodities, or food commodities with the sale of which on commission he is intrusted, to himself or to anyone connected with his business without the written permission of his principal.

Rule 5. Only one brokerage on sugar permitted.—No licensee shall charge a commission or brokerage on any sugar on which one brokerage or commission has already been charged. (Issued Nov. 1, 1917; repealed Feb. 1, 1919.)

Rule 6 (as amended Aug. 15, 1918; effective Aug. 20, 1918). Commissions must not be split with buyer.—The licensee may split with other brokers' commissions or brokerage received on the sale of food commodities, but shall not split such commissions or brokerage with the buyer of the food commodities, or any employee of the buyer. (Issued Nov. 1, 1917, as to sugar; changed Aug. 20, 1918, to cover "food commodities," as noted here; repealed Feb. 1, 1919.)

NOTE.—The payment by a broker of charges incurred by him for telephone and telegraph messages received by him from a buyer does not constitute the splitting of his commissions with the buyer. Money so paid out is an expense of the brokerage business.

MARGINS FOR BROKERS WHO BUY AND SELL FOR THEIR OWN ACCOUNT.

Subject to the provisions of general rules 6, 7, and 8 and the above rules governing commission merchants and brokers, brokers may in proper and necessary transactions buy and sell for their own account. Transactions of this kind should be confined to the smallest possible volume, and in every case must be justified by the necessity of completing cars or dividing carloads among smaller buyers; such merchants engaged in this business should be guided by the following-suggested margins, which are to be regarded as maximum gross profits, but are not permitted unless corresponding service is rendered:

	Per cent.
All flour (except wheat and rye flour), hominy, grits, corn meal, oatmeal, rolled oats, beans, rice, etc.	4
Licensed cereals in packages, licensed canned goods, licensed dried fruits	5

These margins shall be inclusive of any brokerage received.

In every case where a broker sells for his own account any nonperishable goods that he has purchased from a particular principal, and has received, or is entitled to receive, a brokerage on such goods, he must deduct such brokerage before fixing his margin of profit as a jobber.

XIV. SUGARS AND SIRUPS.

A. SPECIAL REGULATIONS GOVERNING DEALERS IN GLUCOSE, REFINERS' SIRUPS, MAPLE SIRUP, SORGHUM, CANE JUICE SIRUP, CENTRIFUGAL MOLASSES, OPEN-KETTLE MOLASSES, WEST INDIA MOLASSES, AND BLACKSTRAP MOLASSES, AND MANUFACTURERS AND MIXERS OF MIXED SIRUPS AND MIXED MOLASSES.

(Effective Nov. 7, 1918.)

NOTE.—The following regulations do not apply to established wholesale grocers handling sirups or molasses through customary trade channels for the household and bakers trade. Such wholesale grocers are governed by Regulations No. XI and the margins and resale provisions there prescribed. These regulations do apply to all other dealers in pure sirups or molasses, whether sold in original packages or repacked; and to all licensees who mix, blend, or process in any way sirups consisting in whole or in part of sirups, glucose, or molasses of any kind.

Rule 1. Reasonable profits prescribed.—The licensee without regard to market or replacement value at the time of such sale shall sell glucose, refiner's sirups, maple sirup, sorghum, cane-juice sirup, centrifugal molasses, open-kettle molasses, West India molasses, blackstrap molasses, and all mixed sirups and mixed molasses at not more than a reasonable advance over the average purchase price of all lots of the same grade and size, of the same commodity or the ingredients thereof, in his possession or invoiced to him not contracted to be sold. The licensee shall keep a record of the manner in which such average has been arrived at, and he shall take as the cost of all stock remaining on hand from lots already averaged the average cost previously arrived at. In selling commodities not yet invoiced to him he shall sell at not more than a reasonable advance over the actual purchase price to him of all lots of the same grade and size of the same commodity, or the ingredients thereof, purchased by him but not yet invoiced to him. (Issued Nov. 7, 1918; canceled Jan. 10, 1919.)

NOTE.—Margins for dealers in pure refiners' sirups or glucose.—Under the above rule the Food Administration will consider any gross margins above delivered cost in excess of those listed below taken by dealers in pure refiners' sirups or glucose, as prima facie evidence of a violation of the statute and this regulation. A violation of these margins will therefore be considered cause for the revocation of a dealer's license.

(a) Where glucose or refiners' sirup is sold by a dealer in car lots (including mixed cars), not to exceed 5 per cent.

(b) Where glucose or refiners' sirup is sold by a dealer in less than car lots to bakers, mixers, or manufacturers, not to exceed 12 to 15 per cent.

(c) Where glucose or refiners' sirup is sold to a wholesale grocer under the provision of rule 2, following, in less than car lots, not to exceed 7½ per cent.

(d) Where the dealer breaks original packages he may add to his cost the cost of the new packages plus actual cost of such packing, in no case to exceed 5 per cent.

The margins named are large enough to include all ordinary carrying charges. If general conditions should later necessitate the carrying of goods for a longer period than usual, further consideration will be given to this feature.

The above margins do not justify the taking of a profit greater than was taken by the licensee in prewar times. A large part of the commodities covered by this rule are dealt with in large quantities, and it is quite possible that dealers who handle them in such quantities will receive an unreasonable profit if they take the full maximum margin. In such cases they should continue to sell at somewhat lower margins. Dealers in refiners' sirups and glucose are also subject to the 6 per cent profit limitation following:

Profits for dealers and mixers of sirup, glucose, and molasses.—The Food Administration will consider a net earning of more than 6 per cent upon the gross sales of pure and mixed sirups, glucose, and molasses by any dealer in sirups as above defined, or by any sirup mixer or blender, to be prima facie evidence of a violation of the rule which prohibits the taking of unreasonable profits (general rule 1-A-5). This percentage will be calculated for the semiannual periods making up the licensee's fiscal year. The Federal income and excess-profits taxes may not be deducted, but all other taxes may be considered as expenses. The limitation does not modify or abrogate the general principles contained in the Food Administration regulations that a licensee should not earn more than a reasonable net profit on its capital invested.

Blackstrap molasses and refiners' sirups prices.—The following maximum prices have been named for refiners' sirups and blackstrap molasses sold by the refiner or dealer in tank cars and based on the cost of imported raw sugar and domestic beet manufacture:

	Per gallon in barrels.	Per gallon in bulk.
	Cents.	Cents.
Refiners' sirups, highest grade (fancy filtered).....	55	50
Refiners' sirups, medium grade (filtered).....	40	35
Refiners' sirups, low grade (unfiltered).....	30	25
Blackstrap molasses.....	23	18

The maximum prices named also apply to imported blackstrap. These prices are f. o. b. cars at seaboard point or point of production, net cash in 10 days without discount. They include brokerage, and if sirups or molasses are distributed in tank cars they include the margin allowed to dealer, so that no dealer may sell blackstrap molasses in tank cars at more than 18 cents plus freight and tank-car charges. Where blackstrap molasses or sirups are distributed in barrels, the dealer's margins named may be added to the maximum price.

Where sirups are distributed in packages smaller than barrels, the packer may add to the bulk price the actual cost of such packages.

Rule 2. Resale of glucose and refiners' sirups limited.—The licensee shall not resell pure glucose or pure refiners' sirups except (1) to a manufacturer, baker, or mixer using such article in his manufacture, (2) to a retail grocer or consumer, (3) to wholesale grocers under one of the following circumstances:

A. Continuous service.—The seller may customarily and continuously serve in less than carload lots wholesale grocers who are serving retail grocers but who are unable for some sufficient and legitimate reason to purchase direct from the source of supply.

B. Carload buying.—A sirup dealer may enjoy the benefit of carload rates from distant points and sell to smaller wholesale grocers who are unable to buy the commodity in carload lots.

C. Warehousing.—A sirup dealer may continuously and customarily furnish cold-storage or other warehousing service and sell to wholesale grocers who have not adequate facilities of that character.

D. Surplus stocks.—A sirup dealer may dispose of surplus stocks bought, not for speculation but in good faith, for the reasonably anticipated requirements of his business under the rules and regulations and which he finds himself unable to dispose of to his regular customers. The fact that such goods have not been warehoused by such dealer will be regarded as prima facie evidence that they were not bought in good faith.

No person who purchases glucose or refiners' sirups from a dealer, except a wholesale or retail grocer buying under subdivisions (2) or (3) above, shall resell such glucose or sirup without the written permission of the United States Food Administration. (Issued Nov. 7, 1918; repealed Dec. 17, 1918.)

NOTE.—Wholesale grocers purchasing from a dealer are forbidden to resell, except to retailers, manufacturers, or consumers, under the wholesale grocers' regulations (No. XI) and are limited to a margin of 12 per cent.

Permission to resell will be given in proper cases upon the condition that no person from whatever source he buys shall sell glucose or refiners' sirups in bulk at an advance over the manufacturer's price of the particular lot sold greater than that permitted to a single dealer plus actual freight.

Sirup mixers may sell their mixed sirups and molasses to any wholesale grocer.

XV. SPECIAL REGULATIONS GOVERNING ALL DISTRIBUTORS OF FRESH FRUITS AND VEGETABLES.

Rule 9. Terms to be included in every contract unless expressly agreed otherwise.—The licensee shall include in every contract for the sale of fresh fruits and vegetables to be shipped by a common carrier the following terms, and these terms shall be understood as included in every such contract between licensees, even though not expressly stated; provided, however, that the said terms may be varied by express agreement in writing. (Issued Jan. 28, 1918; repealed Dec. 10, 1918.)

TERMS OF CONTRACT.

A. The seller shall be responsible for and reimburse the buyer for any failure of the goods to conform to the grade, quality, or condition specified in the contract of sale, except that all sales made f. o. b. point of origin shall be construed to mean that the buyer assumes all risks of damage in transit not caused by the shipper whether there is a bill of lading to the order of the seller or not.

B. The shipment shall be deemed to have reached destination when placed on any railroad team track or private unloading track or where awaiting consignee's order for placing on such team or private unloading track. The burden of locating a shipment on such arrival shall be on the consignee, provided that the consignor has billed the shipment with proper instructions as to the railroad notifying the consignee. The failure of the railroad to notify the consignee will not be construed as releasing the consignee from his obligations to the consignor, provided proper advice as to the car number has been given to the consignee by the consignor. But if the consignee uses every reasonable effort to locate a car and fails, he shall not be responsible for failing to learn of its arrival.

NOTES.—The rule issued as series B, special rule 13, effective January 28, 1918, is amended by the above rule.

This rule applies to the sale of cars in transit, provided the seller advises the buyer that the car is in transit, the date of shipment, and if possible, where it is located.

NOTE TO RULES 3 TO 9, INCLUSIVE.—The above rules have been prepared after conference with representatives of those engaged in the business of shipping and receiving perishable food commodities, and have been based on recommendations from them in order to meet a condition which has resulted in great waste of fresh fruits and vegetables throughout the country. The rules are designed to prevent delay in unloading the shipment of goods contrary to contract, and the resulting traffic congestion and food waste.

It is essential that all licensees should cooperate in good faith with the Food Administration to avoid improper shipments, rejections, and disputes, and to arrange quickly for prompt release, handling, or unloading of the goods involved, and to submit any dispute promptly to arbitration. It is strongly recommended that contracts for the sale of fresh fruits and fresh vegetables be definite as to the quality and grade of goods and terms of sale and delivery, and be evidenced by a proper memorandum in writing. The Food Administration will consider the certificate of any food-products inspector of the Bureau of Markets of the United States Department of Agriculture as prima facie evidence of the condition of the goods. If no such inspector is available, great weight will be attached to inspection by expert officials of trade organizations. Where no official inspectors are available, due weight will be given to the judgment of such unofficial experts as may have made inspection or are designated or approved by the Food Administration.

In all cases submitted to arbitration or settlement where the shipment is made, draft, bill of lading attached, the consignor should direct the bank holding his draft to retain the proceeds thereof and to distribute the same according to the result of the final determination. Thereupon the consignee should pay said draft and release the bill of lading.

In the case of commodities where it is customary to assort or recondition, and where necessary to preserve food values and prevent waste, fresh fruits and vegetables should be assorted or reconditioned by the consignee upon the consignor's request to recondition and his agreement to arrange for the payment of properly substantiated claims.

B. ADDITIONAL SPECIAL REGULATIONS GOVERNING COMMISSION MERCHANTS, BROKERS, AND AUCTIONEERS DEALING IN FRESH FRUITS OR FRESH VEGETABLES.

Rule 1. Commission or brokerage not to be unreasonable or discriminatory.—The licensee shall not charge directly or indirectly an unjust, unreasonable, discriminatory, or unfair commission or brokerage on the sale of fresh fruits or fresh vegetables. (July 10, 1918; repealed Dec. 10, 1918.)

NOTE.—The Food Administration in enforcing this rule will insist that any proposed increase in rates be submitted to the local Federal food administrator and that the reason for any increased rate over the prewar normal be justified to him, subject to the general supervision of the United States Food Administration before such increased rate is put into effect.

This rule was formerly included in series B, general rule 5, governing all licensees as issued November 1, 1917.

Rule 2. Prompt remittance and proper account of sales to be rendered.—The licensee shall remit promptly following the sale of fresh fruits or vegetables received on consignment for sale or distribution, and shall render to the consignor an account showing the true sales and with charges only for services actually performed, and expenses actually incurred by the licensee. (Issued Nov. 1, 1917, as to "food commodities"; repealed Dec. 10, 1918.)

NOTE.—This rule is in conformity with special rule 2, of series B, issued November 1, 1917.

From November 1, 1917, to April 16, 1918, the rule governing all commission merchants, brokers, and auctioneers which limited their charges to " * * * that which ordinarily and customarily prevails under normal conditions in the locality in which * * * their business is conducted * * *" applied to these dealers in perishables.

XVI. DISTRIBUTORS OF FRESH FISH AND FROZEN FISH.

C. ADDITIONAL SPECIAL REGULATIONS GOVERNING COMMISSION MERCHANTS AND BROKERS DEALING IN FRESH FISH OR FROZEN FISH.

Rule 1. Commission or brokerage not to be unreasonable or discriminatory.¹—The licensee shall not charge directly or indirectly an unjust, unreasonable, discriminatory, or unfair commission or brokerage on the sale of fresh fish or frozen fish. (Issued Aug. 24, 1918; repealed Dec. 17, 1918.)

NOTE.—The Food Administration in enforcing this rule will insist that any proposed increase in rates be submitted to the local food administrator and that the reason for any increased rate over the prewar normal be justified to him, subject to the general supervision of the United States Food Administration before such increased rate is put into effect.

This rule was formerly included in series B, general rule 5, governing all licensees as issued November 1, 1917.

Rule 2. Prompt remittance and proper account of sales to be rendered.—The licensee shall remit promptly following the sale of fresh fish or frozen fish received on consignment for sale or distribution, and shall render to the consignor an account showing the true sales and with charges only for services actually performed, and expenses actually incurred by the licensee. (Issued Nov. 1, 1917, as to "food commodities"; repealed Dec. 17, 1918.)

NOTE.—This rule is in conformity with special rule 2, of series B, issued November 1, 1917.

Rule 3. Agent not to buy from principal unless noted on account of sales.—The licensee shall not directly or indirectly sell consigned fresh fish or frozen fish or such commodities with the sale of which on commission he is entrusted.

¹ From Nov. 1, 1917, to Apr. 16, 1918, the rule governing all commission merchants, brokers, and auctioneers, which limited their charges to " * * * that which ordinarily and customarily prevails under normal conditions in the locality in which * * * their business is conducted * * *" applied to these dealers in perishables.

to himself or to anyone connected with his business, unless he notes the facts of such transaction on the account of sales. (Issued Nov. 1, 1917, as to "food commodities"; repealed Dec. 17, 1918.)

NOTE.—This rule is in conformity with special rule 4, series B, issued November 1, 1917.

When a licensee sells to himself or to anyone connected with his business, he must clearly show on the account of sales that he himself bought the fish and also clearly show the quantity and at what price they were taken over.

RECOGNIZED FUNDAMENTALS APPLYING TO THE STORING AND DISTRIBUTION OF FROZEN FISH.

Storers of frozen fish, whether storing at the producing districts or in the distributing markets, perform an important function in preserving the overproduction of the various seasonal varieties for consumption during periods of scant production—i. e., the winter months.

They are a direct and potent aid in encouraging and fostering the production of the fisheries by enabling the various producing units to operate steadily and at full efficiency.

Broad differences in the first costs of frozen fish must prevail generally, affected as they are by the uncertainties surrounding production, influence of water temperatures, storms, feed conditions, and many other natural factors incident to the industry.

The period of marketability is limited to the cold-weather months. The pack of any one variety must be sold in competition with the total pack of all kinds of frozen fish throughout the country aggregating over a score of important varieties and many miscellaneous varieties. Marketing must also be carried on in competition with the daily supplies of fresh-caught fish, which fluctuate widely during the winter months.

No satisfactory determination of total storage stocks and average costs on most of the varieties of frozen fish can be reached until after the completion of the fall runs.

Storers of frozen fish and distributors must necessarily contend with these complex and uncertain factors. The business is so speculative in its nature and so variable in its results from season to season that ordinary methods of estimating margins of profit, whether upon particular varieties or the business as a whole are difficult of application.

The practice of the original storers in selling portions of their pack of particular varieties in advance of the termination of the season of fresh production is a natural outgrowth of the uncertainty. It is a safeguard both for producers and storers and tends to remove some of the speculative features naturally inherent to the industry.

PRESENT POLICY OF REGULATIONS.

The particular attention of the frozen-fish industry is called to general license regulations No. 1 (printed in a separate pamphlet) governing all industries licensed by the United States Food Administration.

(1) The reports required from all licensees will furnish a basis from which to survey the operations of all licensees during the season of 1918-19.

As the season progresses special reports will be requested whenever deemed advisable. These will supplement our follow up of daily quotations in the principal distributing centers.

(2) With the approach of winter certain staple varieties of frozen fish stored in heavy volume will be given special consideration, and the United States Food Administration hopes, if such action is deemed to be desirable and practicable, to announce maximum prices beyond which these particular varieties can not be sold to the retailer or supplier of hotels and institutions. Such maximum prices, when announced will be based on merchandise costs, with due allowance for reasonable margins of profit.

Such maximums, when announced, must be accepted as guides only. They do not modify the rules and must not be regarded by storers or owners of relatively low-cost packs as an invitation to take unreasonable profits.

Rule 5 of the general license regulations provides as follows:

"The licensee shall not import, manufacture, store, distribute, sell, or otherwise handle any food commodities on an unjust, exorbitant, unreasonable, discriminatory, or unfair commission, profit, or storage charge."

We call attention to the fact that storers of frozen fish in districts favored by a heavy average production will have acquired their stocks at a much lower cost than storers where the runs of fish have been short and unfavorable. The United States Food Administration will expect the rapid pushing of all low-cost packs through the usual distributing channels early in the season, and under such conditions as will naturally bring about prices to the retailer and the supplier of hotels and institutions materially below any maximum prices which may hereafter be established.

(3) Attention is also called to general rule 6 regarding resales within the trade. The aim of the United States Food Administration is to keep the supplies of the various varieties of frozen fish moving naturally, freely, and as rapidly as possible into consuming channels at the prevailing prices determined solely by an open unrestricted market in each distributing district and without local or general manipulation and without advantage being taken by the trade of temporary emergencies creating artificial price conditions.

August 24, 1918.

XVIII. DISTRIBUTORS OF POULTRY.

(Effective Dec. 9, 1918.)

A. SPECIAL REGULATIONS GOVERNING DISTRIBUTORS OF FRESH POULTRY.

INTERTRADING RESTRICTED.

General rule 6 provides as follows:

"The licensee, in selling food commodities, shall keep such commodities moving to the consumer in as direct line as practicable and without unreasonable delay. Resales within the same trade without reasonable justification, especially if tending to result in a higher market price to the retailer or consumer, will be dealt with as an unfair practice."

The United States Food Administration recognizes the following classes of dealers in fresh poultry:

1. Original packers and shippers.
2. Commission merchants and wholesalers.
3. Jobbers and suppliers of hotels and institutions.
4. Retailers.

All trading in fresh poultry must contribute toward moving the poultry in a direct line to the consumer. Sales between dealers in any one of the classes mentioned above are prohibited, except as follows: Sales between wholesalers in different cities will, for the present, be permitted where necessary to supply the reasonable requirements of the buyer's business, provided there is an actual shipment of the goods, and provided the movement between cities is in the direction of normal crop movement from producer to consumer. In addition thereto, not more than two sales between dealers in class 2 may be made without obtaining the consent of the local Federal food administrator if such sales are necessary to supply the reasonable requirements of the buyer's business, but more than two sales between dealers in class 2 shall not be made without the written consent of the local Federal food administrator. One sale, and only one, between dealers in the same class other than class 2 may be made without obtaining the consent of the local Federal food administrator if such sale is necessary to supply the reasonable requirements of the buyer's business, but more than one such sale shall not be made without the written consent of the local Federal food administrator.

In no case shall a dealer sell fresh poultry to any dealer in a class further removed from the consumer than the class in which the seller is included; for example, a jobber shall not sell to a wholesaler, or a retailer to a wholesaler.

No objection will be made to sales of fresh poultry that are made at a price that is less than or equal to the initial cost to the seller of the particular commodities sold, nor are such sales to be counted as sales between dealers in the same class.

Licensees will be expected to find out whether sales are justifiable by obtaining information as to the class in which the seller and buyer are dealing, and the location and class of the licensee from whom the seller purchased. This information should be placed on all confirmation of sales.

B. SPECIAL REGULATIONS GOVERNING DISTRIBUTORS OF FROZEN POULTRY.

DEFINITIONS.

In the following rules the different kinds of dealers in frozen poultry are defined as follows:

(a) An original packer or shipper is a person, firm, corporation, or association that assembles and packs the poultry for market or storage.

(b) A commission merchant is a person, firm, corporation, or association that solicits for sale or receives for sale, and sells food products on a commission basis, or that acts

as agent or representative of shippers, packers, and other distributors in the marketing of food products for a fixed package charge or on a percentage basis.

(c) A wholesaler is a person, firm, corporation, or association other than the original packer or shipper that sells to jobbers or to suppliers of hotels and institutions.

(d) A jobber is a person, firm, corporation, or association that sells or distributes to retailers.

(e) A supplier of hotels and institutions is a person, firm, corporation, or association that sells to hotels, restaurants, clubs, dining-car or steamship companies, public or private institutions, or to retail dealers requiring specially selected stock and being furnished a service similar to that rendered to hotels and institutions.

(f) A retailer is a person, firm, corporation, or association that sells or distributes to consumers.

(g) The original storer is the person, firm, corporation, or association that owns poultry when first placed in a cold-storage warehouse.

NOTES.—(1) Where a licensee sells poultry within 30 days from the date of original storage, the buyer may also be considered the original storer to the extent that he may add to the maximum advance over cost allowed in selling as a wholesaler, jobber, etc., any part of 6 per cent over the first storer's cost not added by the first storer. In such cases the first storer who sells within 30 days must inform the buyer what portion of 6 per cent over his cost he has added.

(2) Where a definite lot of poultry is sold before it is placed in a cold-storage warehouse, and if title to this lot actually passes to the purchaser, or if title is retained by the seller merely as security for the purchase price, and thereafter the poultry is put in the warehouse, the purchaser will be considered the original storer, even though the poultry is carried and insured in the seller's name.

Determination of costs.—Wherever in the following rules dealers in frozen poultry are limited in the advance over cost at which such poultry may be sold, "cost" shall be construed to include the purchase price, or in the case of the original packer or shipper the cost into storage, plus storage charges, interest on the goods in storage, and insurance on goods in storage incurred by the seller up to the time of sale, but not to include any other expenses.

In determining cost the licensee may average the cost of all frozen poultry of the same kind and grade which have not already been contracted to be sold, and may take such average cost as the cost of any particular lot of that kind and grade. The licensee must keep a record of the manner in which such average has been arrived at and shall take as the cost of all stock remaining on hand from lots already averaged, the average cost previously arrived at. If the cost of any frozen poultry is averaged, the cost of all frozen poultry must be averaged.

NOTES.—(1) The maximum advances over cost specified in the following rules are not to be regarded as normal or so recognized by the Food Administration. They are intended only to prevent speculation and are purposely made wide to cover cases where methods of doing business are more expensive, to the extent that such methods are justified. Those maximum advances must not be exceeded in selling any specified lot of poultry, and the average advance over cost charged by any dealer must not be more than sufficient to return to him a reasonable profit on his investment in accordance with general rule 5, which is as follows: "The licensee shall not import, manufacture, store, distribute, sell, or otherwise handle any food commodities on an unjust, exorbitant, unreasonable, discriminatory, or unfair commission or storage charge."

(2) Profits on different sales can not be averaged. The licensee is limited on each transaction to the maximum profit permitted by the rule and regulations.

(3) Where a dealer in the sale of poultry adds less than the maximum advance over cost permitted by the rules, the buyer is not, because of this fact, permitted to add to the maximum advance over cost allowed to him any part of the maximum advance allowed to the seller which the seller did not add.

(4) The special rules regulating the profits of dealers in frozen poultry do not apply to poultry that is placed in a cold-storage warehouse, but which is removed from the cold-storage warehouse, for distribution for consumption, within 30 days after the date of the original entry of such poultry into the cold-storage warehouse.

SPECIAL REGULATIONS.

Rule 1. Purchase from dealer charging unreasonable margin prohibited.—No licensee shall knowingly purchase frozen poultry from a dealer who sells at a greater advance over cost than the maximum specified in the following rules. (Issued Mar. 2, 1918; repealed Jan. 8, 1919.)

Rule 2. Maximum margins for original packer or shipper.—The original packer or shipper, storing in a cold-storage warehouse, shall not sell frozen poultry to wholesalers at an advance of more than 6 per cent over cost. In case frozen poultry is stored in the name of a commission merchant, the original storer shall be deemed to be the consignor for whom the commission merchant acts as agent. An additional advance not exceeding 5 per cent of cost may be charged by the original packer or shipper in selling to jobbers or suppliers of hotels and institutions. An additional advance not exceeding 10 per cent of cost may be charged in selling to retailers, or an additional advance not exceeding 15 per cent of cost may be charged if the packer performs the functions of a supplier of hotels and institutions, as heretofore defined. (Is-

sued Mar. 2, 1918; margins slightly changed July 26, 1918; repealed Jan. 8, 1919.)

Rule 3. Maximum commissions.—A commission merchant shall not receive a commission of more than 5 per cent on frozen poultry consigned to him by shippers or packers. If a commission merchant acts as an agent for dealers other than shippers or packers for the distribution of surplus stocks, the selling price shall not exceed the maximum advance over cost to the consignor permitted to such consignor by the following rules, which advance shall include the commission for such sale. A commission merchant who takes to account consigned frozen poultry shall not receive any other profit beyond the amount of the commission before specified.

A commission merchant shall require from consignors a statement of cost of goods and maximum selling price allowable under these rules. (Issued Mar. 2, 1918; repealed Jan. 8, 1919.)

Rule 4. Maximum margin for wholesaler.—A wholesaler shall not sell frozen poultry at an advance of more than 5 per cent over cost. If a wholesaler also sells as a jobber, he shall not sell at an advance of more than 10 per cent over cost, as provided for jobbers in rule 5. The above maximum advances may be increased by not to exceed 6 per cent of cost in cases where the wholesaler is also the original storer in a cold-storage warehouse. (Issued Mar. 2, 1918; repealed Jan. 8, 1919.)

Rule 5. Maximum margin for jobber.—A jobber shall not sell frozen poultry at an advance of more than 10 per cent over cost. The above maximum advance may be increased by not to exceed 6 per cent of cost in cases where the jobber is also the original storer in a cold-storage warehouse.

Rule 6. Maximum margin for supplier of hotels and institutions.—A supplier of hotels and institutions shall not sell frozen poultry at an advance of more than 15 per cent over cost. The above maximum advance may be increased by not to exceed 6 per cent of cost in cases where the supplier of hotels and institutions is also the original storer in a cold-storage warehouse.

Rule 7. Direct line of distribution defined.—A sale by any dealer in frozen poultry in any of the classes indicated below to a dealer in any succeeding class shall be considered to be in the direct line of distribution:

Class 1: Original packers and shippers.

Class 2: Commission merchants—wholesalers.

Class 3: Jobbers—suppliers of hotels and institutions.

Class 4: Retailers—hotels and institutions.

Rule 8. Intertrading restricted.—All trading in frozen poultry shall serve to move the frozen poultry in the direct line of distribution to the consumer, and nothing contained in this or the preceding rule shall authorize any licensee to use any more indirect method of distribution of frozen poultry. One sale of any lot of frozen poultry between dealers in the same class may be made where necessary to supply the reasonable requirements of the buyer's business, provided a report is made promptly to the local Federal food administrator. Such sales shall be made at an advance of not more than 5 per cent over cost, except when sold by the original storer, who shall sell at not more than 6 per cent over cost. If sold by a commission merchant to a wholesaler, the commission shall not exceed 5 per cent.

Except for such sales, no licensee shall sell to another in the same or any preceding class of distribution without the written consent of the local Federal food administrator, which will be given only in extraordinary circumstances. Where such consent is given, the dealer shall not sell at an advance of more than one-fourth cent per pound over cost, nor in the case of a commission merchant selling to a wholesaler shall the commission amount to more than one-fourth cent per pound: *Provided, however,* That nothing in this rule shall prevent sales at cost: *Provided further,* That nothing in this rule shall prevent sales for immediate delivery from one city to another for actual distribution to relieve exceptional local shortage, but a report of any such sale must be promptly made to the local Federal food administrator, with the reasons therefor. Such sales shall be made at a price not to exceed 5 per cent over cost; or if sold by a commission merchant to a wholesaler, the commission shall not exceed 5 per cent: *And provided further,* That nothing in the rule shall prevent a commission merchant from acting as an agent for dealers other than original shippers and packers, as provided in rule 3. (Issued Mar. 2, 1918; added to July 26, 1918; repealed Jan. 8, 1919.)

NOTE.—Licensees will be expected to find out whether sales are justifiable by obtaining information as to the class in which the seller and the buyer are dealing and the location and class of the licensee from whom the seller purchased. This information should be placed on all confirmations of sales.

Rule 9. Brokerage to be included in margins.—If brokers act as agents in any sale of frozen poultry under these rules, brokerage paid shall not be added to the selling price of the goods. (Issued Mar. 2, 1918; repealed Jan. 8, 1919.)

C. ADDITIONAL REGULATIONS GOVERNING COMMISSION MERCHANTS, BROKERS, AND AUCTIONEERS DEALING IN POULTRY.

Rule 1. Commission or brokerage not to be unreasonable or discriminatory.—The licensee shall not charge, directly or indirectly, an unjust, exorbitant, unreasonable, discriminatory, or unfair commission or brokerage on the sale of poultry. (Issued July 10, 1918; repealed Jan. 8, 1919.)

NOTE.—The Food Administration in enforcing this rule will insist that any proposed increase in rates be submitted to the local Federal food administrator and that the reason for any increased rate over the prewar normal be justified to him, subject to the general supervision of the United States Food Administration, before such increased rates are put into effect. The rates to be charged by a commission merchant are more specifically treated under B, rule 3, supra.

Rule 2. Prompt remittance and proper account sales to be rendered.—The licensee shall remit promptly following the sale of poultry received on consignment for sale or distribution and shall render to the consignor an account showing the true sales and with charges only for services actually performed and expenses actually incurred by the licensee. (Issued Nov. 1, 1917, as to "food commodities"; repealed Jan. 8, 1919.)

NOTE.—When a commission merchant receives a consignment of poultry and guarantees to the consignor a definite selling price, he must show on the account sales the actual price at which the goods are sold, together with services actually performed and expenses actually incurred, and as a separate item must show any sum paid to the consignor by reason of the commission merchant's contract of guaranty. Failure to do this will be considered a violation of the above rule and also a misstatement of the price at which commodities are being sold, in violation of general rule 19.

Rule 3. Agent not to buy from principal unless noted on account of sales.—The licensee shall not, directly or indirectly, sell consigned poultry or poultry with the sale of which on commission he is intrusted to himself or to anyone connected with his business, unless he notes the facts of such transaction on the account of sales.

NOTE.—This rule is not intended to relieve the licensee from any legal obligation resting on him to obtain authorization from the shipper before taking to account goods consigned to him or to obtain the ratification of such a transaction.

From November 1, 1917, to April 16, 1918, the rule governing all commission merchants, brokers, and auctioneers which limited their charges to " * * * that which ordinarily and customarily prevails under normal conditions in the locality in which * * * their business is conducted * * *" applied to these dealers in perishables.

Rule 15. Certificate of value to be furnished to cold-storage warehousemen.—The licensee storing poultry with a cold-storage warehouseman upon which the warehouseman either directly or indirectly loans money shall upon request of such warehouseman file with him a certificate stating the market value of the goods stored and shall make no false or misleading statement in such certificate nor shall he fail to maintain the margin required by the regulations of the Food Administration on loans made by cold-storage warehousemen. (Issued Feb. 7, 1918, as to "commodities required to be licensed"; repealed Jan. 8, 1919.)

XIX. DISTRIBUTORS OF EGGS.

INTERTRADING RESTRICTED.

General rule 6 provides as follows:

"The licensee, in selling food commodities, shall keep such commodities moving to the consumer in as direct a line as practicable and without unreasonable delay. Resales within the same trade without reasonable justification, especially if tending to result in a higher market price to the retailer or consumer, will be dealt with as an unfair practice."

The United States Food Administrator recognizes the following classes of dealers in fresh eggs:

1. Original packers and shippers.
2. Commission merchants and wholesalers.
3. Jobbers and suppliers of hotels and institutions.
4. Retailers.

All trading in fresh eggs must contribute toward moving the eggs in a direct line to the consumer. Sales between dealers in any one of the classes men-

tioned above are prohibited except as follows: Sales between wholesalers in different cities will for the present be permitted where necessary to supply the reasonable requirements of the buyer's business, provided there is an actual shipment of the goods, and provided the movement between cities is in the direction of normal crop movement from producer to consumer. In addition thereto not more than two sales of any lot of fresh eggs between dealers in class 2 may be made without obtaining the consent of the local Federal food administrator if such sales are necessary to supply the reasonable requirements of the buyer's business, but more than two sales between dealers in class 2 shall not be made without the written consent of the local Federal food administrator. One sale, and only one, between dealers in the same class other than class 2 may be made without obtaining the consent of the local Federal food administrator if such sale is necessary to supply the reasonable requirements of the buyer's business, but more than one such sale shall not be made without the written consent of the local Federal food administrator.

In no case shall a dealer sell fresh eggs to any dealer in a class further removed from the consumer than the class in which the seller is included; for example, a jobber shall not sell to a wholesaler, or a retailer to a wholesaler.

No objection will be made to sales of fresh eggs between dealers in the same class that are made at a price that is less than or equal to the initial cost to the seller of the particular commodities sold, nor are such sales to be counted as sales between dealers in the same class.

Licensees will be expected to find out whether sales are justifiable by obtaining information as to the class in which the seller and the buyer are dealing and the location and class of the licensee from whom the seller purchased. This information should be placed on all confirmations of sales.

B. SPECIAL REGULATIONS GOVERNING DISTRIBUTORS OF COLD-STORAGE EGGS.

In the following rules the different kinds of dealers in cold-storage eggs are defined as follows:

(a) An original packer or shipper is a person, firm, corporation, or association that assembles and packs the eggs for market or storage.

(b) A commission merchant is a person, firm, corporation, or association that solicits for sale or receives for sale and sells food products on a commission basis, or that acts as agent or representative of shippers, packers, and other distributors in the marketing of food products for a fixed package charge or on a percentage basis.

(c) A wholesaler is a person, firm, corporation, or association, other than the original packer or shipper, that sells to jobbers or to suppliers of hotels and institutions.

(d) A jobber is a person, firm, corporation, or association that sells or distributes to retailers.

(e) A supplier of hotels and institutions is a person, firm, corporation, or association that sells to hotels, restaurants, clubs, dining-car or steamship companies, public or private institutions, or to retail dealers requiring specially selected stock and being furnished a service similar to that rendered to hotels and institutions.

(f) A retailer is a person, firm, corporation, or association that sells or distributes to consumers.

(g) The original storer is the person, firm, corporation, or association that owns eggs when first placed in a cold-storage warehouse.

NOTE.—(1) Where a licensee sells eggs within 30 days from the date of original storage, the buyer may also be considered the original storer to the extent that he may add to the maximum advance over cost allowed in selling as a wholesaler, jobber, etc., any part of 6 per cent over the first storer's cost not added by the first storer. In such cases the first storer who sells within 30 days must inform the buyer what portion of 6 per cent over his cost he has added.

(2) Where a definite lot of eggs is sold before it is placed in a cold-storage warehouse, and if title to this lot actually passes to the purchaser, or if title is retained by the seller merely as security for the purchase price, and thereafter the eggs are put in the warehouse, the purchaser will be considered the original storer even though the eggs are carried and insured in the seller's name.

Wherever in the following rules dealers in cold-storage eggs are limited in the advance over cost at which such eggs may be sold, "cost" shall be construed to include the purchase price, or in the case of the original packer or shipper the cost into storage, plus storage charges, interest on the goods in storage, and insurance on goods in storage incurred by the seller up to the time of sale, but not to include any other expenses, except as hereinafter provided in the case of candled eggs.

In selling eggs candled by the licensee the actual net candling loss may be included in the cost, but the expense of labor and materials in candling and all repacking expenses shall not be included.

In determining cost licensees may average the cost of all lots of cold-storage eggs of the same grade which were originally stored in the same month and which have not ~~already been~~ contracted to be sold, and may take such average cost as the cost of any particular lot. The licensee must keep a record of the manner in which such average had been arrived at and shall take as the cost of all stock remaining on hand ~~from lots already averaged~~ the average cost previously arrived at. If the cost of any cold-storage eggs is averaged, the cost of all cold-storage eggs must be averaged.

NOTE.—(1) The maximum advances over cost specified in the following rules are not to be regarded as normal or so recognized by the Food Administration. They are intended only to prevent speculation and are purposely made wide to cover cases where the methods of doing business are more expensive, to the extent that such methods are justified. These maximum advances must not be exceeded in selling any specified lot of eggs, and the average advance over cost charged by any dealer must not be more than sufficient to return to him a reasonable profit on his investment in accordance with general rule 5, which is as follows: "The licensee shall not import, manufacture, store, distribute, sell, or otherwise handle any food commodities on an unjust, exorbitant, unreasonable, discriminatory, or unfair commission, profit, or storage charge."

(2) The special rules regulating the profits of dealers in cold-storage eggs do not apply to eggs that are placed in a cold-storage warehouse, but which are removed from the cold-storage warehouse for distribution for consumption within 30 days after the date of the original entry of such eggs into the cold-storage warehouse.

(3) Profits on different sales can not be averaged. The licensee is limited on each transaction to the maximum profit permitted by the rules and regulations.

(4) Where a dealer in the sale of cold-storage eggs adds less than the maximum advance over cost permitted by the rules, the buyer is not because of this fact permitted to add to the maximum advance over cost allowed to him any part of the maximum advance allowed to the seller which the seller did not add.

Rule 1. Purchase from dealer charging unreasonable margin prohibited.—No licensee shall knowingly purchase cold-storage eggs from a dealer who sells at a greater advance over cost than the maximum specified in the following rules. (Issued Mar. 2, 1918; repealed Feb. 14, 1919.)

Rule 2. Maximum margins for original packer or shipper.—The original packer or shipper storing in a cold-storage warehouse shall not sell cold-storage eggs to wholesalers at an advance of more than 6 per cent over cost. In case cold-storage eggs are stored in the name of a commission merchant, the original storer shall be deemed to be the consignor for whom the commission merchant acts as agent. An additional advance not exceeding 4 per cent of cost may be charged by the original packer or shipper in selling eggs at mark or 7 per cent over cost in selling eggs candled by him to jobbers or suppliers of hotels and institutions. An additional advance may be charged in selling to retailers not exceeding 5 per cent of cost if sold at mark (i. e., in original packages), and not exceeding 10 per cent of cost in selling eggs candled by him. An additional advance not exceeding 12 per cent of cost may be charged if the original packer performs the functions of a supplier of hotels and institutions, as heretofore defined. (Issued Mar. 2, 1918; margins slightly changed July 26, 1918, and Nov. 11, 1918; repealed Feb. 14, 1919.)

Rule 3. Maximum commissions.—A commission merchant shall not receive a commission of more than 4 per cent on cold-storage eggs consigned to him. The selling price of cold-storage eggs sold through a commission merchant shall not exceed the maximum advance over cost permitted to the consignor by these rules, which advance shall include the commission for the sale. A commission merchant who takes to account consigned cold-storage eggs shall not receive any other profit beyond the amount of the commission before specified. A commission merchant shall require from consignors a statement of cost of goods and maximum selling price allowable under these rules. (Issued Mar. 2, 1918; repealed Feb. 14, 1919.)

Rule 4. Maximum margin for wholesaler.—A wholesaler shall not sell cold-storage eggs at mark at an advance of more than 4 per cent over cost or 7 per cent over cost if he candles the eggs. If a wholesaler also sells as a jobber, he shall not sell eggs at mark at an advance of more than 5 per cent over cost or eggs candled by him at more than 10 per cent over cost as provided for jobbers in rules 5 and 6. The above maximum advances may be increased by not to exceed 6 per cent of cost, in cases where the wholesaler is also the original storer in a cold-storage warehouse. (Issued Mar. 2, 1918; margins slightly changed Nov. 11, 1918; repealed Feb. 14, 1919.)

Rule 5. Maximum margin for jobber of cold-storage eggs at mark.—A jobber shall not sell cold-storage eggs at mark (i. e., in original packages) at an

advance of more than 5 per cent over cost. (Issued Mar. 2, 1918; repealed Feb. 14, 1919.)

Rule 6. Maximum margin for jobber of candled eggs.—A jobber shall not sell eggs candled by him at an advance of more than 10 per cent over cost. The maximum advance prescribed in rules 5 and 6 may be increased by not to exceed 6 per cent of cost in cases where the jobber is also the original storer in a cold-storage warehouse. (Issued Mar. 2, 1918; repealed Feb. 14, 1919.)

Rule 7. Maximum margin for supplier of hotels and institutions.—A supplier of hotels and institutions shall not sell eggs candled and selected by him at more than 12 per cent over cost. This maximum advance may be increased by not to exceed 6 per cent of cost in cases where the supplier of hotels and institutions is also the original storer in a cold-storage warehouse. (Issued Mar. 2, 1918; repealed Feb. 14, 1919.)

Rule 8. Maximum margin for retailer storing eggs during 1918.—A retailer who is the original storer of eggs during 1918 shall not sell such eggs candled and selected by him at an advance of more than 21 per cent over cost. (Issued Mar. 2, 1918; margins changed Oct. 22, 1918; repealed Feb. 14, 1919.)

NOTE.—Maximum margins for retailers on all sales of eggs other than those above specified will be announced separately.

Rule 9. Direct line of distribution defined.—A sale by any dealer in cold-storage eggs in any of the classes indicated below to a dealer in any succeeding class shall be considered to be in the direct line of distribution:

Class 1. Original packers and shippers.

Class 2. Commission merchants—Wholesalers.

Class 3. Jobbers—Suppliers of hotels and institutions.

Class 4. Retailers—Hotels and institutions.

(Issued Mar. 2, 1918; repealed Feb. 14, 1919.)

Rule 10. Intertrading restricted.—All trading in cold-storage eggs shall serve to move the cold-storage eggs in the direct line of distribution to the consumer and nothing contained in this or the preceding rule shall authorize any licensee to use any more indirect method of distribution than he has been accustomed to use in the past in the distribution of eggs. One sale of any lot of cold-storage eggs between dealers in the same class may be made where necessary to supply the reasonable requirements of the buyer's business. Such sales shall be made at an advance of not more than 2 per cent over cost, except when sold by a wholesaler or jobber who is also the original storer who shall sell at not more than 6 per cent over cost. Where a dealer buys cold-storage eggs from another dealer in the same class other than the original storer he must sell the eggs so bought at not more than the maximum advances over cost specified in the above rules minus 2 per cent. A licensee who does business both as a wholesaler and jobber may buy as a jobber with the intention of reselling to a retailer or of making the one permissible resale to other jobbers, or to suppliers of hotels or institutions.

Except for such sales no licensee shall sell to another in the same or any preceding class of distribution without the written consent of the local Federal food administrator, which will be given only in extraordinary circumstances. Where such consent is given the dealer shall not sell at an advance of more than 10 cents per case over cost, nor in the case of a commission merchant selling to a wholesaler shall the commission amount to more than 10 cents per case: *Provided, however,* That nothing in this rule shall prevent sales for immediate delivery from one city to another for actual distribution to relieve exceptional local shortage, but a report of any such sale must be promptly made to the local Federal food administrator, with the reasons therefor. Such sales shall be made at a price not to exceed 4 per cent over cost. (Issued Mar. 2, 1918; advance at which dealers may sell changed July 26, 1918, and Oct. 31, 1918; repealed Feb. 14, 1919.)

NOTE.—Licensees will be expected to find out whether sales are justifiable by obtaining information as to the class in which the seller and the buyer are dealing and the location and class of the licensee from whom the seller purchased. This information should be placed on all confirmations of sales.

Rule 11. Brokerage to be included in margins.—If brokers act as agents in any sale of cold-storage eggs under these rules brokerage paid shall not be added to the selling price of the goods. (Issued Mar. 2, 1918; repealed Feb. 14, 1919.)

Rule 16. Certificate of value to be furnished to cold-storage warehousemen.—The licensee storing eggs with a cold-storage warehouseman upon which the warehouseman either directly or indirectly loans money shall upon request of

such warehouseman file with him a certificate stating the market value of the goods stored and shall make no false or misleading statement in such certificate nor shall he fail to maintain the margin required by the regulations of the Food Administration on loans made by cold-storage warehousemen. (Issued Feb. 7, 1918, as to "commodities required to be licensed"; repealed Feb. 14, 1919.)

C. ADDITIONAL REGULATIONS GOVERNING COMMISSION MERCHANTS, BROKERS, AND AUCTIONEERS DEALING IN EGGS.

Rule 1. Commission or brokerage not to be unreasonable or discriminatory.—The licensee shall not charge, directly or indirectly, an unjust, exorbitant, unreasonable, discriminating, or unfair commission or brokerage on the sale of eggs. (Issued July 10, 1918; repealed Feb. 14, 1919.)

NOTE.—The Food Administration in enforcing this rule will insist that any proposed increase in rates be submitted to the local Federal food administrator and that the reason for any increased rate over the prewar normal be justified to him, subject to the general supervision of the United States Food Administration, before such increased rates are put into effect.

The rates to be charged by a commission merchant are more specifically treated under B, rule 3, *supra*.

Rule 2. Prompt remittance and proper account sales to be rendered.—The licensee shall remit promptly following the sale of eggs received on consignment for sale or distribution and shall render to the consignor an account showing the true sales and with charges only for services actually performed and expenses actually incurred by the licensee. (Issued Nov. 1, 1917, as to "food commodities"; repealed Feb. 14, 1919.)

NOTE.—Where a commission merchant receives a consignment of poultry or eggs and guarantees to the consignor a definite selling price, he must show on the account sales the actual price at which the goods are sold, together with services actually performed and expenses actually incurred, and as a separate item must show any sum paid to the consignor by reason of the commission merchant's contract of guaranty. Failure to do this will be considered a violation of the above rule governing commission merchants and also a misstatement of the price at which commodities are being sold in violation of general rule 19.

Rule 3. Agent not to buy from principal unless noted on account of sales.—The licensee shall not, directly or indirectly, sell consigned eggs or eggs with the sale of which on commission he is intrusted, to himself or to anyone connected with his business, unless he notes the facts of such transaction on the account of sales. (Issued Nov. 1, 1917, as to "food commodities"; repealed Feb. 14, 1919.)

NORM.—This rule is not intended to relieve the licensee from any legal obligation resting on him to obtain authorization from the shipper before taking to account goods consigned to him or to obtain the ratification of such a transaction.

From November 1, 1917, to April 16, 1918, the rule governing all commission merchants, brokers, and auctioneers which limited their charges to " * * * that which ordinarily and customarily prevails under normal conditions in the locality in which * * * their business is conducted * * *" applied to these dealers in perishables.

D. ADDITIONAL SPECIAL REGULATIONS GOVERNING RETAILERS OF EGGS.

Rule 1. Fresh or cold-storage eggs must not be sold at retail at more than reasonable advance over cost.—The licensee shall not sell fresh or cold-storage eggs at retail at more than a reasonable advance over cost without regard to the market or replacement value at the time of the sale. Cost shall include purchase price and transportation charges, and where the retailer actually candles and grades eggs he may include in the cost the actual loss from such candling and grading. In the case of cold-storage eggs, cost shall include the following additional items:

1. Storage charges actually incurred.
2. Insurance charges actually incurred.
3. Interest on money invested at the current rate while eggs are in storage.

The licensee may average the cost of all lots of eggs of the same grade (and in the case of cold-storage eggs, all eggs of the same grade which were originally stored in the same month) in his possession at the point from which the sale is made which have not already been contracted to be sold, and may take such average cost as the cost of any particular lot. When new lots are added and a new average calculated, the licensee shall include in the new averaging all stock remaining on hand from lots already averaged at the average cost previously determined. If the cost of any eggs is averaged the cost of all eggs must be

averaged. When costs are averaged the licensee must keep a record of the manner in which such average has been arrived at. (Issued Oct. 22, 1918; repealed Feb. 14, 1919.)

NOTE.—The Retail Section of the Distribution of Perishables of the United States Food Administration has determined that any advance over cost in excess of 7 cents to 8 cents a dozen is unreasonable and will be considered evidence of violation of the above rule.

The 7 cents per dozen represents the maximum for stores conducting the cash and carry or no service plan, while the 8 cents per dozen is the maximum margin for the extra service stores extending credit and delivery.

Retailer may have benefit of fractional cost on any transaction.—Retailers whose delivered terminal costs figure in fractions may have the benefit of such fractional costs. For example, if eggs cost at terminal delivery 46½ cents per dozen, the selling price may be figured as follows:

CASH AND CARRY STORES.

Amount of sale.	Cost.	Margin.	Total.	Fraction added.	Maximum selling price.
	Cents.	Cents.	Cents.	Cent.	
1 dozen.....	46½	7	53½	3	\$0.54
2 dozen.....	92½	14	106½	6	1.07
3 dozen.....	138½	21	159½	9	1.60

The maximum selling price for the extra service or credit and delivery stores would be 1 cent per dozen higher.

In determining margins at 7 cents and 8 cents per dozen on eggs with the fractional cost in the dealer's favor, the United States Food Administration has given due consideration to the rising costs of operation which must be met by the dealer.

Margin for retailer who stored eggs during 1918.—The attention of any retailer who was the original storer of eggs during the season of 1918, is called to the fact that he is still governed by rule 8 of the special regulations governing distributors of cold-storage eggs in respect to transactions in these eggs.

SUPPLEMENT.

TO LICENSEES WHO ARE RECEIVERS OF POULTRY OR EGGS (BUTTER AND OTHER PRODUCE), ON CONSIGNMENT OR AS PURCHASERS.

A licensee in receiving goods shipped in to him acts in one of two capacities, either as an agent of the shipper in selling commodities or as a purchaser of the commodities from the shipper. Some licensees are engaged in both forms of business and confusion has arisen in the minds of shippers as to exactly how their shipments are to be handled. Licensees should be guided by the following principles:

(1) If the licensee acts as an agent for the shipper in disposing of goods he must render an account sales showing the sales made for the account of the shipper, the amount deducted by him for compensation, and any other charges. In some cases it is the practice for commission merchants to take to their own account goods which are consigned to them as agents. Where an agent so takes to account this fact is required to be noted on the account sales by the regulations of the Food Administration. The shipper will then know the nature of the transaction. This requirement is in addition to any obligation at common law resting on the receiver to obtain the consent of the shipper to such a transaction. Licensees who handle commodities for shippers for a certain compensation, even though not expressed in terms of percentage or called a commission, are none the less commission merchants, and must comply with the regulations governing commission merchants.

(2) If the licensee is not acting as agent for the shipper and the intention is that the licensee shall purchase from the shipper, this matter should be clear to the shipper as well as the receiver of the commodities. The use of expressions by the receiver in connection with such a transaction which would lead the shipper to believe that the receiver is acting as an agent for the shipper is misleading and unfair.

Purchases are made under different arrangements as to price, more commonly in one of the following ways:

- (a) The receiver agrees to pay the shipper a definite price upon arrival.
- (b) The receiver agrees to pay the shipper a price having a definite relation to the market price on the day of arrival.
- (c) The receiver agrees to pay the shipper a price to be determined by the receiver on the day of arrival.

Such agreements are not prohibited by the Food Administration. In the third case (c) it is clearly implied in the agreement that the price to be paid by the receiver shall not be arbitrary but shall be reasonable under all the circumstances and shall bear a

proper relation to the market value. The Food Administration will so construe such agreements and the parties should so understand them.

Where a dealer is handling commodities in several different ways the only method of making clear the nature of any particular transaction is a written or oral definite understanding. Cases, however, have been called to our attention where a licensee never does any commission business, always purchases shipments at a net price, and where the receiver is constantly receiving shipments from shippers with whom he has never had any prior negotiations. In such cases the nature of the business may be entirely clear to the shipper without a definite written agreement. The buyer should show by a memorandum of purchase exactly what the nature of the transaction is, including the purchase price and any deductions permitted by the contract of purchase, and he must not use any expression which will lead the shipper to believe that the transaction is an agency transaction. In order to avoid misleading statements the Food Administration has insisted that the licensee shall discontinue the use of the term "net return basis" to describe purchases. "Net return basis" implies that there is a gross return and that something has been deducted to reach a net return. It is an expression applicable to an agency transaction and not to a purchase.

XX. BUTTER.

A. SPECIAL REGULATIONS GOVERNING MANUFACTURERS AND DISTRIBUTORS OF BUTTER.

Rule 1 (amended Dec. 31, effective Jan. 6, 1919). Cold-storage butter to be sold at reasonable advance over cost.—The licensee dealing in cold-storage butter shall sell such butter without regard to the market or replacement value at the time of sale at not more than a reasonable advance over cost to him of the particular butter sold, provided that the licensee may average by weight the cost of all cold-storage butter of the same grade which has not already been contracted to be sold. The licensee shall keep a record of the manner in which such average has been determined. When new lots are added and a new average calculated the licensee shall include in the new average all stock remaining on hand of lots already averaged at the average cost previously determined. If the cost of any cold-storage butter is averaged, the cost of all cold-storage butter must be averaged.

Cost for the purpose of this rule shall include:

1. Purchase price.
2. Transportation charges, if any (not including drayage).
3. Storage charges actually incurred on cold-storage butter.
4. Insurance charges actually incurred on cold-storage butter.
5. Interest on money invested at the current rate, while butter is in cold storage.
6. Actual cost of printing if the butter is put in print form from tubs or cubes.

Cost shall not include any allowance for shrinkage in weight, commissions, expenses of breaking packages and repacking, or other expenses than those herein listed. (Issued June 19, 1918, as to "cold-storage butter"; changed July 19, 1918, to apply to all butter; changed Jan. 6, 1919, to apply to cold-storage butter; repealed Jan. 28, 1919.)

NOTE.—In any case where a licensee owns his own cold-storage warehouse in which butter owned by him is stored more than 30 days he may include in his calculation of cost a charge for warehousing equal to that ordinarily paid to a public warehouse for similar services.

Reports to be furnished on demand.—The licensee must be prepared to furnish to the United States Food Administration or to the Federal food administrator of his State upon demand a full report on costs and margins charged or on the maximum prices charged in any given period for any grade of butter or any other information which may be considered necessary for the purpose of this rule.

Maximum margins.—The Food Administration will consider the sale of any grade of butter by any dealer other than a manufacturer or retailer at an advance over cost, as hereinbefore defined, of more than the following margins as prima facie evidence of a violation of the food control act and the above rule:

- (a) One cent per pound on car lot sales.
- (b) One and one-half cents per pound on sales of less than a car lot, but amounting to 7,000 pounds or more.
- (c) Two cents per pounds on sales of less than 7,000 pounds, but amounting to 3,500 or more.

(d) Two and one-half cents per pound on sales of less than 3,500 pounds, but amounting to 700 pounds or more.

(e) Three cents per pound on sales less than 700 pounds but amounting to 100 pounds or more.

(f) Three and three-fourths cents per pound on sales of less than 100 pounds.

In addition to the selling margin, which normally should be considerably below the above maximum margins, and must in no case exceed such maximum margins, any dealer who carries butter in cold storage more than two full calendar months may add a margin of not more than 1 cent per pound, and an additional one-fourth cent per pound for each calendar month thereafter during which he carries the butter in storage. The total margin for carrying butter in cold storage shall not exceed 2 cents per pound.

The following table indicates the method by which the dealer may calculate the maximum amounts which may be added to selling margins where a dealer holds butter in storage more than two full calendar months. It should be noted that a calendar month does not mean 30 days.

Month.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
August.....	1										
September.....	1½	1									
October.....	1½	1½	1								
November.....	1½	1½	1½	1							
December.....	2	1½	1½	1½	1						
January.....	2	2	1½	1½	1½	1					
February.....	2	2	2	1½	1½	1½	1				
March.....	2	2	2	2	1½	1½	1½	1			
April.....	2	2	2	2	2	1½	1½	1½	1		
May.....	2	2	2	2	2	2	1½	1½	1½	1	
June.....	2	2	2	2	2	2	2	1½	1½	1½	1
July.....	2	2	2	2	2	2	2	2	1½	1½	1½

NOTE.—The months in the column at the left indicate months in which the butter is sold. The figures indicate cents per pound. For example, a dealer storing butter in June and selling in October may add 1½ cents per pound to his selling margin, which must in no case exceed the margins indicated under rule 1.

The above maximum margins are not to be regarded as fair normal margins or as so recognized by the Food Administration. They are intended to prevent speculation and are purposely made wide enough to cover cases where the methods of doing business are more expensive, to the extent that such methods are justified. These maximum advances must not be exceeded in selling any lot of butter and the prices charged by any dealer must not in any case be more than sufficient to return to him a reasonable profit on his investment.

Licensees will be expected to sell butter in usual quantities to customers and where it appears that sales are being made in smaller quantities than customarily for the purpose of charging larger margins than would be proper on larger sales such larger margins will not be considered justifiable. Larger margins are only proper for sales of smaller quantities where selling in small quantities is the usual course of business involving a greater expense in operation.

Where a licensee contracts to sell a quantity of butter to be delivered in smaller quantities at future dates the dealer must be guided by the maximum margins indicated for sales of the quantity contracted to be sold and not for sales of the amount of any delivery.

Sales from branch houses.—Where butter is transferred by any dealer to a branch house of such dealer in the same or another city such transfer shall not be made at an advance over cost of more than three-fourths of a cent per pound, regardless of quantity. In such case, however, when the transaction is in as direct a line of distribution as practicable the branch house may figure the transfer price as its purchase price and may sell butter at an advance over cost on such basis not greater than the maximum margins indicated above. If the branch house transfers the butter to another branch house of the same dealer the total maximum margin added by both houses shall not be greater than the maximum margin allowed to the first branch house by this rule.

Collusive sales.—Any sale by a dealer to another dealer at a price higher than the price which the second dealer would have to pay in buying on the open market will be considered evidence of a collusive sale intended to defeat the purpose of rule 1 by increasing the purchaser's cost, and the price which he may charge upon a rising market.

Rule 2 (amended Dec. 31, to be effective Jan. 6, 1919). Manufacturer's margins on sales of cold-storage butter.—The manufacturer in selling butter manufactured and placed in cold storage by him shall be governed by rule 1, and the maximum margins indicated therewith, except that in figuring his cost as provided in rule 1, he shall take instead of the purchase price the market quotation on the kind and grade of butter placed in cold storage as quoted in a

well-recognized daily commercial price current in the city where and on the day when the goods are placed in storage. In case there is no well-recognized daily price current in the city where the goods are stored then he may use the quotation given in a daily commercial price current in the large market nearest the place of storage. From this must be deducted the amount by which the freight from the point of manufacture to the place of storage is less than the freight from the place of manufacture to such large market. In case the freight from the place of manufacture to the place of storage exceeds the freight from the place of manufacture to such large market, the excess may be added to the market quotation. (Rule issued June 19, 1918, provided methods of computing purchase price of manufacturer who acts as wholesaler or jobber. Dec. 12, 1918, maximum margin on butter set at 5 cents per pound over cost of butter fat. Jan. 6, 1919, maximum margins indicated for cold storage butter. Repealed Jan. 28, 1919.)

Rule 3 (amended Dec. 31, to be effective Jan. 6, 1919). Commissions limited.—No licensee shall pay and no commission merchant shall receive a commission on cold-storage butter of more than the following:

Car lot sales.....	$\frac{3}{4}$ cent per pound
Sales less than car lot.....	1 cent per pound

The licensee shall inform any commission merchant selling butter for him of the maximum permitted price at which such butter may be sold.

The commission merchant shall not charge both a commission and also a profit on cold-storage butter. (Rule issued June 19, 1918, provided commission on cold-storage butter which was subsequently changed as to fresh and cold storage on July 19, 1918, Aug. 8, 1918, and Jan. 6, 1919; repealed Jan. 28, 1919.)

Rule 4 (amended Dec. 31, to be effective Jan. 6, 1919). Intertrading restricted.—The licensee in selling cold-storage butter shall keep it moving to the consumer in as direct a line as practicable and without unreasonable delay. The direct line of distribution of butter is from a licensee in any of the following classes to a licensee in any succeeding class:

Class 1. Manufacturers.

Class 2. Wholesalers and jobbers. These include all persons, firms, corporations, and associations who distribute butter in any way, except at retail, and all manufacturers who perform services customarily performed by wholesalers and jobbers.

Class 3. Retailers, hotels, restaurants, and institutions.

NOTE.—Any transactions that savor of dealing in which a profit accrues to the dealer without corresponding service, are clear violations of the rule and will subject the offender to revocation of his license and to such other penalty as the law provides.

The following types of sales between dealers will be considered justifiable, but sales other than those described between dealers in the same class will be considered as prima facie evidence of violation of general rule 6.

A. A sale by any dealer in butter to a dealer in any succeeding class will be considered as in the direct line of distribution.

B. One sale, and only one sale, of the same goods between dealers in class 2 in the same city will be considered justifiable when necessary to supply the reasonable requirements of the buyer's business, without the special consent of the local Federal Food Administrator, provided, however, that a second sale of the same goods between dealers in class 2 in the same city will be permitted without the consent of the local Federal Food Administrator if this sale is made at an advance over cost of not more than one-half of the margins indicated above, and provided that the seller notifies the buyer that this is a second sale.

C. In addition to such resales as are otherwise indicated as justifiable, sales between dealers in class 2 in different cities will be considered justifiable, provided, that an actual delivery of the butter follows the sale, and that the shipment is for the purpose of obtaining supplies from primary markets for reasonable requirements of the purchaser's business; provided further, that not more than three such sales of any lot of butter between dealers in class 2 shall be made without special permission; and the third sale shall be made at an advance over cost of not more than one-half of the above margins.

D. Any resale between dealers without any advance over cost will be considered as justifiable in addition to such other resales as are permitted.

(Rule issued June 19, 1918, governed resales of cold-storage butter; changed July 19, 1918, to include all butter, and Jan. 6, 1919, to cold-storage butter; repealed Jan. 28, 1919.)

Rule 5 (amended Dec. 31, to be effective Jan. 6, 1919). The licensee making second sale in same class to notify buyer.—The licensee in class 2 as defined above who purchases cold-storage butter from another wholesaler or jobber in such class, or from a manufacturer performing the services, or a wholesaler or jobber, and who resells to another dealer in class 2, shall notify such dealer of the prior sales of such butter within that class of which he has knowledge. (Issued June 19, 1918, as to cold-storage butter; changed July 19, 1918, to all butter; changed Jan. 6, 1919, to cold-storage butter; repealed Jan. 28, 1919.)

NOTE.—This information should be disclosed at the time of the transaction and should be placed by the seller upon the invoice in order that there shall be a permanent record.

Rule 10. Certificate of value to be furnished to cold-storage warehousemen.—The licensee storing butter with a cold-storage warehouseman upon which the warehouseman either directly or indirectly loans money shall, upon request of such warehouseman, file with him a certificate stating the market value of the goods stored and shall make no false or misleading statement in such certificate nor shall he fail to maintain the margin required by the regulations of the Food Administration on loans made by cold-storage warehousemen. (Issued Feb. 7, 1918, as to "commodities required to be licensed"; repealed Jan. 28, 1919.)

B. ADDITIONAL REGULATIONS GOVERNING BROKERS, COMMISSION MERCHANTS, AND AUCTIONEERS DEALING EITHER IN FRESH OR COLD-STORAGE BUTTER.

Rule 1. Commission or brokerage not to be unreasonable or discriminatory.—The licensee shall not charge, directly or indirectly, an unjust, exorbitant, unreasonable, discriminatory, or unfair commission or brokerage on the sale of butter. (Dec. 23, 1918; repealed Jan. 6, 1919.)

NOTE.—The Food Administration in enforcing this rule will insist that any proposed increase in rates be submitted to the local Federal food administrator, and that the reason for any increased rate over the prewar normal be justified to him, subject to the general supervision of the United States Food Administration before such increased rates are put into effect.

The rates to be charged by a commission merchant are more specifically treated under A, rule 3, *supra*.

Rule 2. Prompt remittance and proper account sales to be rendered.—The licensee shall remit promptly following the sale of butter received on consignment for sale or distribution, and shall render to the consignor an account showing the true sales and with charges only for services actually performed and expenses actually incurred by the licensee. (Issued Nov. 1, 1917, as to "food commodities"; repealed Jan. 6, 1919.)

NOTE.—Where a commission merchant receives a consignment of butter and guarantees to the consignor a definite selling price, he must show on the account sales the actual price at which the goods are sold, together with services actually performed and expenses actually incurred, and as a separate item must show any sum paid to the consignor by reason of the commission merchant's contract of guaranty. Failure to do this will be considered a violation of the above rule governing commission merchants and also a misstatement of the price at which commodities are being sold in violation of general rule 19.

From November 1, 1917, to April 16, 1918, the rule governing all commission merchants, brokers, and auctioneers which limited their charges to " * * * that which ordinarily and customarily prevails under normal conditions in the locality in which * * * their business is conducted * * *" applied to these dealers in perishables.

C. ADDITIONAL SPECIAL REGULATIONS GOVERNING RETAILERS IN BUTTER.

The attention of all retail dealers in butter is called to Rule A-1 of the above regulations, which is headed: "Rule 1. Butter to be sold at a reasonable advance over cost."

The United States Food Administration will regard any advance in excess of 6 to 7 cents per pound over cost (as defined in rule 1) as unreasonable and as evidence of violation of rule 1. The 6 cents per pound represents the maximum margin for stores conducted on the cash and carry or no-service plan, while 7 cents per pound is the maximum margin for the extra-service stores extending credit and delivery.

Retailer may have benefit of fractional cost on any transaction.—Retailers whose delivered terminal costs figure in fractions may have the benefit of such fractional costs on any transaction. For example, if butter costs at terminal delivery 46½ cents per pound, the selling price may be figured as follows:

CASH AND CARRY STORES.

Amount of sale.	Cost.	Margin.	Total.	Fraction added.	Maximum selling price.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	
1 pound.....	46½	6	52½	½	\$0.53
2 pounds.....	92½	12	104½	1	1.05
3 pounds.....	138½	18	156½	1½	1.57

The maximum selling price for the extra service or credit and delivery stores would be 1 cent per pound higher.

In determining margins at 6 cents and 7 cents a pound on butter with the fractional costs in the dealer's favor, the United States Food Administration has given due consideration to the rising costs of operation which must be met by the dealer.

In addition to the above margins the retailer who carries butter in cold storage more than two full calendar months may add not more than 1 cent a pound and an additional one-fourth cent a pound a month for each calendar month thereafter during which he carries the butter in cold storage. The total amount for carrying butter in cold storage so added, however, shall not exceed 2 cents per pound.

The food administration will consider any sale of butter by a retail dealer at a greater margin than herein outlined as evidence subjecting the dealer to a revocation of his license or such other penalty as the law provides.

XXI. CHEESE.

A. SPECIAL REGULATIONS GOVERNING MANUFACTURERS AND DISTRIBUTORS OF ALL KINDS OF CHEESE.

Rule 1. Cheese to be sold at reasonable advance over cost.—The licensee dealing in cheese shall sell cheese without regard to market or replacement value at not more than a reasonable advance over the cost of the particular cheese sold, provided that the licensee may average by weight the cost of all cheese of the same kind, shape, and grade which have not already been contracted to be sold. The licensee shall keep a record of the manner in which such average has been determined. When new lots are added and a new average calculated, the licensee shall include in the new averaging all stock remaining on hand of lots already averaged at the average cost of such lots previously determined. If the cost of any cheese is averaged, the cost of all cheese must be averaged. (Issued June 12, 1918; margins on different grades of cheese changed July 12, 1918, and Aug. 2, 1918; repealed Jan. 6, 1919.)

Cost for the purpose of this rule shall include:

1. Purchase price.
2. Transportation charges, if any (not including drayage).
3. Storage charges actually incurred, provided that the cheese has been in storage more than 60 days.
4. Insurance charges actually incurred, provided that the cheese has been in storage more than 60 days.
5. Interest on money invested at the current rate, provided that the cheese has been in storage more than 60 days.
6. Actual cost of paraffining, if any, not to exceed one-fourth cent per pound.
7. Actual cost of reboxing or dividing the type of American or Cheddar cheese, known as Twins or double or triple Daisies, into smaller units, but in no case exceeding one-half cent per pound.

Cost shall not include any allowance for shrinkage in weight, commissions, expenses of breaking packages and repacking, or any other expenses than those herein listed.

NOTE.—In any case where a dealer owns his own storage warehouse in which cheese is stored more than 60 days the dealer may include in his calculation of cost a charge for warehousing equal to that ordinarily paid to a public warehouse for similar services. Where cheese is carried in a private warehouse without refrigeration, refrigeration rates must not be charged.

The dealer must calculate the actual cost of paraffining and will not be permitted arbitrarily to take one-fourth cent per pound as this cost. In cases where the cheese is reweighed after paraffining the increased weight must be taken into consideration in determining the cost.

Reports to be furnished on demand.—The licensee must be prepared to furnish to the United States Food Administration or to the Federal food administrator of his State upon demand a full report on costs and margins charged or on the maximum prices charged in any given period for any kind of cheese or any other information which may be considered necessary for the purpose of this rule.

The maximum margins indicated by the Food Administration are not to be regarded as fair normal margins or as so recognized by the Food Administration. They are intended only to prevent speculation and are purposely made wide enough to cover cases where the methods of doing business are more expensive, to the extent that such methods are justified. These maximum advances must not be exceeded in selling any lot of cheese, and the prices charged by any dealer must not in any case be more than sufficient to return to him a reasonable profit on his investment.

Sales from branch houses.—Where cheese is transferred by any dealer to a branch house of such dealer in the same or another city such transfer shall not be considered a sale governed by the maximum margins indicated for sales. No advance over cost for such transfer will be allowed except where the main house actually handles the cheese, in which case advances over cost for transfer not greater than those indicated below will be permitted, provided the transaction is in as direct a line of distribution as practicable; and the branch house may figure the transfer price (see below) as its purchase price and may sell cheese at an advance over cost on such basis not greater than the maximum margins indicated below. If the branch house transfers the cheese to another branch house of the same dealer, the total margin added by both branch houses must not be greater than the maximum margins indicated below.

Collusive sales.—Any sale by a dealer to another dealer at a price higher than the price which the second dealer would have to pay in buying on the open market will be considered evidence of a collusive sale intended to defeat the purpose of rule 1 by increasing the purchaser's cost and the price which he may charge upon a rising market.

The price on the open market does not necessarily mean the price established by a dairy board, especially when the dairy board does not hold its meetings daily.

Cost in the case of purchases of ungraded cheese.—The cost of any grade of cheese must be figured on the purchase price of that grade. Where a dealer purchases ungraded cheese at one price per pound regardless of the grades contained in the lot he must not figure the purchase price per pound of any part of this cheese higher than the price per pound actually paid for the entire lot.

The growing practice due to present market conditions of buying cheese, particularly round Swiss, from the factory before it is sufficiently matured to permit of the determination of the quality of the product increases materially the speculative risk assumed by the buyer. It also results in lowering the standard of quality. The Food Administration is strongly of the opinion that this tendency should be stopped as uneconomical and believes that the installation of grades will do much to stabilize values in this product. Where dealers sell on grade they can reduce their speculative risk if they do not purchase the cheese until its quality can be reasonably determined. The above requirement as to figuring costs is intended to accomplish this result.

MAXIMUM MARGINS.

The Food Administration will consider the sale of any cheese of any of the following kinds by any dealer other than the manufacturer or the retailer at an advance over cost as hereinbefore defined of more than the following margins as prima facie evidence of a violation of the food control act and the above rule.

Licensees will be expected to sell cheese in usual quantities to customers and where it appears that sales are being made in smaller quantities than customarily for the purpose of charging larger margins than would be proper on larger sales such larger margins will not be considered justifiable. Larger margins are only proper for sales of smaller quantities where selling in small quantities is the usual course of business involving a greater expense in operation.

Where a licensee contracts to sell a quantity of cheese to be delivered in smaller quantities at future dates the dealer must be guided by the maximum margins indicated for sales of the quantity contracted to be sold and not for sales of the amount of any delivery.

AMERICAN OR CHEDDAR CHEESE.

- (a) Three-fourths cent per pound on car-lot sales.
- (b) One and one-fourth cents per pound on sales less than a car lot but amounting to 7,000 pounds or more.
- (c) One and three-fourths cents per pound on sales less than 7,000 pounds but amounting to 4,000 pounds or more.
- (d) Two and one-half cents per pound on sales less than 4,000 pounds but amounting to 1,000 pounds or more.
- (e) Three cents per pound on sales less than 1,000 pounds but amounting to 100 pounds or more.
- (f) Three and one-half cents per pound on sales less than 100 pounds.

In addition to the selling margin, which normally should be considerably below the above maximum margins, a further margin may be added where American or Cheddar cheese is held in a warehouse for more than 30 days, of not to exceed one-fourth cent per pound per month for each and every month after the 30-day period during which the cheese is held in the warehouse by any licensee, but in no case shall the amount so added exceed 2 cents per pound and no further amount shall be added by any licensee after nine months from the date of original storage.

Transfer margins.—The margins for transfer of American or Cheddar cheese to a branch house where the main house actually handles the cheese shall not exceed one-half cent per pound regardless of the quantity.

ROUND OR TUB SWISS CHEESE.

- (a) One and three-fourths cents per pound on car-lot sales.
- (b) Two and one-half cents per pound on sales less than a car lot but amounting to 6,000 pounds or more.
- (c) Three and one-half cents per pound on sales less than 6,000 pounds but amounting to 3,000 pounds or more.
- (d) Four cents per pound on sales less than 3,000 pounds but amounting to one tub or more.
- (e) Five cents per pound on sales less than one tub but amounting to 120 pounds or more.
- (f) Eight cents per pound on sales less than 120 pounds.

In addition to the selling margin, which should normally be considerably below the above maximum margin, a further margin may be added where round or tub Swiss cheese is held in a warehouse for more than 30 days, not to exceed one-fourth cent per pound per month for each and every month after the 30-day period during which the cheese is held in the warehouse by the licensee, but in no case shall the amount so added exceed 2 cents per pound and no further amount shall be added by any licensee after nine months from date of original storage.

Transfer margins.—The margins for transfer of round or tub Swiss cheese to a branch house where the main house actually handles the cheese shall not exceed 1 cent per pound regardless of quantity.

BLOCK SWISS CHEESE.

- (a) One cent per pound on car-lot sales.
- (b) One and three-eighths cents per pound on sales less than a car lot but amounting to 8,000 pounds or more.
- (c) Two cents per pound on sales less than 8,000 pounds but amounting to 1,500 pounds or more.
- (d) Two and one-half cents per pound on sales less than 1,500 pounds but amounting to 750 pounds or more.
- (e) Three cents per pound on sales less than 750 pounds but amounting to 150 pounds or more.
- (f) Four and one-half cents per pound on sales less than 150 pounds.

In addition to the selling margin, which should normally be considerably below the above maximum margins, a further margin may be added where block Swiss cheese is held in a warehouse for more than 30 days, not to exceed one-fourth cent per pound per month for each and every month after the 30-day period during which the cheese is held in the warehouse by any licensee, but in no case shall the amount so added exceed 2 cents per pound and no further amount shall be added by any licensee after nine months from the date of original storage.

Transfer margins.—The margins for transfer of block Swiss cheese to a branch house where the main house actually handles the cheese shall not exceed three-fourths cent per pound regardless of quantity.

BRICK, LIMBURGER, AND MUNSTER CHEESE.

- (a) One and one-fourth cents per pound on car-lot sales.
- (b) One and five-eighths cents per pound on sales less than a car lot, but amounting to 6,000 pounds or more.
- (c) Two and one-half cents per pound on sales less than 6,000 pounds, but amounting to 2,400 pounds or more.
- (d) Three cents per pound on sales less than 2,400 pounds, but amounting to 600 pounds or more.
- (e) Three and one-half cents per pound on sales less than 600 pounds, but amounting to 120 pounds or more.
- (f) Five cents per pound on sales less than 120 pounds.

In addition to the selling margin which should normally be considerably below the above maximum margins, a further margin may be added where brick, Limburger, or Munster cheese is held in a warehouse for more than 30 days, not to exceed three-eighths cent per pound for the first month after the 30-day period and one-fourth cent per pound per month for each of the following months thereafter during which the cheese is held in the warehouse by any licensee; but in no case shall the amount so added exceed 1½ cents per pound and no further amount shall be added by any licensee after six months from the date of original storage.

Transfer margins.—The margins for transfer of brick, Limburger, or Munster cheese to a branch house where the main house actually handles the cheese shall not exceed three-fourths cent per pound, regardless of quantity.

Rule 2. Manufacturers who perform services of dealer or assembler.—Any manufacturer who acts also as an assembler, wholesaler, or jobber shall be subject in such sales to the rules and margins governing assemblers, wholesalers, and jobbers, provided that instead of the purchase price as an assembler, wholesaler, or jobber he shall either—

- (1) Compute the cost of raw materials and the expense of manufacture; or
- (2) In the case of American or Cheddar cheese, take the price during the 10 days after the cheese is manufactured on the shape and grade of cheese in the established primary market on the basis of which the cheese is usually sold by manufacturers. (Issued June 12, 1918; repealed Jan. 6, 1919.)

Rule 3. Commissions not to be unreasonable.—No licensee shall pay, and no commission merchant shall receive, an unreasonable or exorbitant commission in connection with the sales of cheese.

The licensee shall inform any commission merchant selling cheese for him of the maximum permitted price at which such cheese may be sold. (Rule issued June 12, 1918, provided commission of one-half cent per pound. Changed Aug. 2, 1918, to present form. Repealed Jan. 6, 1919.)

NOTE.—"Ten days after the cheese is manufactured" means 10 days after the cheese is removed from the hoops and placed in the curing room.

Under rule 1 the selling price may not be increased by reason of the payment of a commission. Commissions higher than those indicated below will be considered prima facie unreasonable and exorbitant.

(a) *Maximum commissions.*—In the case of American or Cheddar cheese one-half cent per pound on car lots and 1 cent per pound on less than car lots.

(b) In the case of round or tub Swiss cheese 1½ cents per pound on car lots and 1½ cents per pound on less than car lots.

(c) In the case of block Swiss cheese 1 cent per pound on car lots and 1½ cents per pound on less than car lots.

(d) In the case of brick, Limburger, and Munster cheese 1 cent per pound on car lots and 1½ cents per pound on less than car lots.

It should be understood that the above are maximum commissions which may at times be in excess of reasonable commissions.

Rule 4. Intertrading restricted.—The licensee in selling cheese shall keep it moving to the consumer in as direct a line as practicable and without unreasonable delay. The direct line of distribution of cheese is from a licensee in any of the following classes to a licensee in any succeeding class. (Issued June 12, 1918; repealed Jan. 6, 1919.)

Class 1. Manufacturers.

Class 2. Assemblers, wholesalers, and jobbers, including all licensees who receive cheese from manufacturers and grade and assemble cheese for sale, or who distribute it in any way except at retail, and all manufacturers who perform the service customarily performed by an assembler, wholesaler, or jobber.

Class 3. Retailers, hotels, restaurants, and institutions.

NOTE.—Any transactions that savor of dealing in which a profit accrues to the dealer without corresponding service are clear violations of the rule and will subject the offender to revocation of his license and to such other penalty as the law provides.

The following kinds of sales between dealers will be considered justifiable, but sales other than those described between dealers in the same class will be considered as prima facie evidence of violation of the rule:

A. A sale by any dealer in cheese to a dealer in any succeeding class will be considered as in the direct line of distribution.

B. One sale and only one sale of the same cheese between dealers in class 2 in the same city will be considered justifiable when necessary to supply the reasonable requirements of the buyer's business, without the special consent of the local Federal food administrator, provided, however, that a second sale of the same cheese between dealers in class 2 in the same city will be permitted without the consent of the local Federal food administrator if this sale is made at an advance over cost of not more than one-half of the margin indicated above, and provided that the seller notifies the buyer that this is a second sale.

C. In addition to such sales as are otherwise indicated as justifiable, sales between dealers in class 2 in different cities will be considered justifiable, provided that an actual delivery of the cheese follows the sale, and that the shipment is for the purpose of obtaining supplies from primary markets for the reasonable requirements of the purchaser's business; provided further, that not more than three such sales are made of any lot of cheese without special permission.

D. Any sale between dealers without any advance over cost will be considered as justifiable in addition to such other sales as are permitted.

Rule 5. The licensee making a second sale in the same class to notify buyer.—The licensee in class 2 as defined in rule 4 who purchases cheese from another assembler or dealer in such class or from a manufacturer performing the services of an assembler or dealer and who sells to another dealer in class 2, shall notify such dealer of the prior sale and of all other prior sales of such cheese within that class of which he has knowledge. (Issued June 12, 1918; repealed Jan. 6, 1919.)

NOTE.—This information should be disclosed at the time of the transaction and should be placed by the seller upon the invoice in order that there shall be a permanent record.

B. ADDITIONAL REGULATIONS GOVERNING COMMISSION MERCHANTS, BROKERS, AND AUCTIONEERS DEALING IN CHEESE.

Rule 1. Commission or brokerage not to be unreasonable or discriminatory.—The licensee shall not charge, directly or indirectly, an unjust, exorbitant, unreasonable, discriminatory, or unfair commission or brokerage on the sale of cheese. (Issued Dec. 9, 1918; repealed Jan. 6, 1919.)

NOTE.—The Food Administration in enforcing this rule will insist that any proposed increase in rates be submitted to the local Federal food administrator and that the reason for any increased rate over the prewar normal be justified to him, subject to the general supervision of the United States Food Administration, before such increased rates are put into effect.

The rates to be charged by a commission merchant are more specifically treated under A, rule 3, supra.

Rule 2. Prompt remittance and proper account sales to be rendered.—The licensee shall remit promptly following the sale of cheese received on consignment for sale or distribution, and shall render to the consignor an account showing the true sales and with charges only for services actually performed and expenses actually incurred by the licensee. (Issued Nov. 1, 1917, as to "food commodities"; repealed Jan. 6, 1919.)

Rule 3. Agent not to buy from principal unless noted on account of sales.—The licensee shall not, directly or indirectly, sell consigned cheese, or cheese with the sale of which on commission he is intrusted, to himself or to any one connected with his business unless he notes the facts of such transaction on the account of sales. (Issued Nov. 1 1917, as to "food commodities"; repealed Jan. 6, 1919.)

From November 1, 1917, to April 16, 1918, the rule governing all commission merchants, brokers, and auctioneers which limited their charges to " * * * that which ordinarily and customarily prevails under normal conditions in the locality in which * * * their business is conducted * * *" applied to these dealers in perishables.

C. ADDITIONAL SPECIAL REGULATIONS GOVERNING RETAILERS IN CHEESE.

The attention of all retail dealers in cheese is called to A, Rule 1 of the above regulations, headed:

CHEESE TO BE SOLD AT REASONABLE ADVANCE OVER COST.

Under the above rule the retail section of the distribution of perishables of the United States Food Administration will consider the sale of American or Cheddar cheese at an advance in excess of 7 or 8 cents per pound over cost (as

defined in rule 1) as unreasonable and as evidence of violation of rule 1. The 7 cents per pound represents the maximum margin for stores conducted on the cash and carry or no service plan, while 8 cents per pound is the maximum for the extra service stores extending credit and delivery. Dealers whose delivered store-door cost figures in fractions may have the benefit of such fractional cost.

CASH AND CARRY STORES.

Amount of sale.	Cost.	Margin.	Total.	Fraction added.	Maximum selling price.
	Cents.	Cents.	Cents.	Cents.	Cents.
1 pound.....	26½	7	33½	½	34
2 pounds.....	52½	14	66½	1	67
3 pounds.....	78½	21	99½	1½	101

In determining margins at 7 and 8 cents per pound on cheese with the fractional cost in the dealer's favor, the United States Food Administration has given due consideration to the rising costs of operation, which must be met by the dealer.

In addition to the above margin a retailer who carries American or Cheddar cheese in a warehouse for more than 30 days may add not to exceed one-fourth cent per pound per month for each and every month after the 30-day period during which the cheese is held in the warehouse by him, but in no case shall the amount added exceed 2 cents per pound, and no further amount shall be added by the dealer after nine months from the date of original storage.

Dealers should understand that if they average costs they must average the cost of each grade and style separately.

XXIV. REGULATIONS GOVERNING COLD-STORAGE WAREHOUSE-MEN.

Rule 3. Schedules of rates to be filed.—Licensees shall submit on blanks to be furnished for that purpose a statement or schedule showing present rates and charges for storage and other service on each commodity required to be licensed, together with all charges for labor, insurance on contents of warehouses, and whether included in storage rate, cartage, if any, and whether included in storage rate, interest, and all other charges not enumerated. (Such schedule shall be open to inspection at the office of the Food Administration in Washington, D. C., and information as to any particular rate included in any such schedule may be given by mail or telegraph by the representatives of the Food Administration having control of such schedules to persons who, in their opinion, have proper reasons for requesting such information. A copy of such statement or schedule shall be open to inspection at the office of the warehouseman by whom it is filed.) (Issued Nov. 1, 1917; added to Aug. 26, 1918; repealed Feb. 14, 1919.)

NOTE.—Attention is called to general rule 5, which prohibits licensees from making unjust, exorbitant, unreasonable, discriminatory, or unfair storage charges.

The fact that a licensee files with the Food Administration his schedule of rates and charges under special rule 3 does not mean that the rates and charges in such schedule have the approval of the Food Administration. If the Food Administration at any time has reason to believe that any such rates or charges are unjust, unfair, exorbitant, unreasonable, or discriminatory, the licensee will be called upon to justify such rates or charges.

Rule 4. No rates to be charged other than those in schedules filed.—The licensee shall not demand, collect, or receive, directly or indirectly, from any patron or other person concerned any different sum for storage or other services performed than that shown on the schedule filed with the United States Food Administration, or make any charge for services or special allowance or rebate not shown on said schedule, unless he has filed with the United States Food Administration at least 30 days before the change in rate or charge becomes effective an amendment to the schedule showing such change in rate or charge. (Issued Nov. 1, 1917, providing for amendment to storage rates to be filed 5 days before change is effective; changed to 30 days Jan. 28, 1918; repealed Feb. 14, 1919.)

NOTES.—(1) By this rule a licensee is prohibited from storing licensed food commodities at rates fixed by contract or other arrangement that differ from those specified in the filed schedule; when amendments to any schedule are filed the new rates become effective 30 days after filing and at such time storing at the rates superseded by the amendments must cease, any arrangement or agreement to the contrary notwithstanding.

(2) General rule 5 prohibits cold-storage licensees from making unreasonable or discriminatory charges in handling or storing food commodities.

The United States Food Administration recognizes the principle that up to a certain point it ordinarily costs less per unit to handle large lots than small lots of a particular commodity and has no objection to licensees charging a lesser rate per unit for large lots than for small lots if the differentiation in rates is based on variation of cost in handling the particular commodity.

Hereafter the above-mentioned principle must be applied by cold-storage warehousemen in arranging any variations in rates contained in schedules of rates or amendments thereto that are filed.

With respect to rate schedules now on file in which lower rates for large lots or discounts for quantity are stated, no objection has been or will be made to differentiations in rates unless they are obviously merely arbitrary or discriminatory, or in effect constitute a preference to one or a few patrons, or unless, upon investigation, they are found to be without reasonable justification.

All rates must, of course, be contained in the schedule required to be filed with the United States Food Administration and must be clear, explicit, well defined, and intelligible. Every patron is entitled to know his exact classification and the specific rate he is to be charged.

Rule 5. Public cold-storage warehousemen not to lend more than 70 per cent of the value of stored goods.—The licensee shall not make any loan on licensed commodities stored with him, or incur liability by indorsement, guarantee, or otherwise, in connection with any loan on licensed commodities stored with him, in excess of 70 per cent of the market value of such commodities on the date of said loan. A margin of not less than 30 per cent on each loan shall be maintained at all times.

(Any advances made by the licensee on the goods upon which the loan is made, such as freight, cartage, or insurance, shall be included in the 70 per cent of the market value permitted above.)

Loans upon licensed and unlicensed commodities shall in all cases be made separately. (Issued Nov. 1, 1917; added to Aug. 26, 1918; repealed Feb. 14, 1919.)

NOTES.—(1) An advanced charge arises through the payment of money by the warehouseman to some third person, or the assumption of an indebtedness by the warehouseman, with reference to the goods upon which the loan is based. For example, a charge for insurance, freight, or cartage, or prior storage, which the warehouseman has paid or assumed to pay, is an advanced charge, and must be included in estimating the amount of the loan permitted by this rule.

On the other hand, the indebtedness to the warehouseman making the loan for storage charges on the goods or interest on the loan, or any other item which does not represent an advance by the warehouseman to or for the customer with reference to the goods stored, is not an advanced charge and need not be included in estimating the amount of the loan permitted by this rule.

(2) A cold-storage warehouseman in releasing or delivering out any licensed commodities on which such loans as are mentioned in this rule have been made, shall, if such release or delivery would result in the margin on the loan being reduced to less than 30 per cent, require and obtain before or at the time such release or delivery is made a sufficient payment so that the amount of the loan is reduced and the required margin of at least 30 per cent is at all times preserved.

(3) A combined public and private cold-storage warehouseman who sells on credit food commodities required to be licensed and transfers title thereto and who thereafter stores such commodities which remain security for the unpaid portion of the purchase price, is by extending credit in such a transaction indirectly making a loan on such commodities within the meaning of this rule, and he must not so extend credit for more than 70 per cent of the market value of such commodities.

XXV. FEEDING STUFFS.

Rule 7 (as amended, effective Oct. 1, 1918). Feed to be sold at reasonable advance over average cost.—The licensee in any sale of feeding stuffs shall take no more than a reasonable profit for such sale over the average cost of his stock of any commodity on hand or under control not at that time contracted to be sold, and in arriving at the cost of grain he shall take into consideration the gain or loss resulting from any hedging transaction on a grain exchange. (This rule shall not apply to feeding stuffs (other than grain, hay, or seed) purchased by one wholesale feed dealer from another wholesale feed dealer, and no such feeding stuffs so purchased shall be included in calculating the average cost above referred to.) (Issued Jan. 28, 1918; added to Oct. 1, 1918; repealed Jan. 10, 1919.)

NOTE.—This rule does not apply to wheat mill feeds, cottonseed products, rice polish, rice bran, or dried beet pulp, which are dealt with under Special Regulations C and D.

Margins and profits for wholesale dealers in feeding stuffs.—The United States Food Administration considers that in sales of feeding stuffs at wholesale the advance on any individual sale should not in any case exceed the purchase price delivered at railroad station, plus 15 per cent. The Food Administration will therefore consider any sale of feeding stuffs in excess of this advance as a violation of the foregoing rule. This margin will also apply to the sale of corn, oats, rye, or barley as feed, in assorted cars with other feeding stuffs but not in straight carload quantities, but will not apply to wheat mill feeds, cottonseed products, rice polish, rice bran, or dried beet pulp, for

which special margins have been prescribed. For margins applying on straight carload shipments of grain, see the grain dealers' rules No. III-A.

Furthermore, the Food Administration will consider an annual net earning by any wholesale dealer in feeding stuffs of more than 4 per cent upon the total gross sales, if his gross sales of feeding stuffs amount to \$100,000 or more per annum to be prima facie evidence of a violation of the rule which prohibits the taking of unreasonable profits. In the case of dealers who handle wheat mill feeds, cottonseed products, rice polish, rice bran, and dried beet pulp, as well as other feeds, the 4 per cent will be calculated on all sales.

The maximum margin on individual sales is purposely made wide because of the speculative character of the products dealt with and the fluctuating prices which may prevail. As pointed out, the general average on all sales must not exceed 4 per cent advance over the cost of materials and overhead, nor must this 4 per cent limitation modify or abrogate the general principle contained in the Food Administration regulations that a licensee shall not earn more than a reasonable net profit on his capital invested.

Rule 8 (effective Oct. 1, 1918). Margins for wholesale dealer, on feeding stuffs bought from another wholesale dealer.—No wholesale dealer in feeding stuffs shall sell any feeding stuffs which he has purchased from another wholesale dealer, other than grain, hay, or seed, at an advance over the average cost to the dealer who bought direct from the manufacturer, greater than would be reasonable for the first dealer to charge if selling direct to a retailer. No wholesale dealer shall purchase feeding stuffs from another dealer without obtaining from him a written statement giving the average delivered purchase price paid by the dealer who purchased direct from the manufacturer for his stock of such commodity and the margin which he has added. (Repealed Jan. 10, 1919.)

NOTE.—The Food Administration has considered the advisability of prohibiting all resales of feeding stuffs between wholesale feed dealers, but has decided, under the above rule, to permit such resales if the total margin charged by the wholesale dealers does not exceed the margin which would be considered reasonable if the product passed through the hands of one dealer only.

Rule 9 (as amended Dec. 31, 1918). No resales unless cost and margin are stated on sales memorandum and invoice.—No wholesaler or jobber shall sell feed unless he states upon his contract or sales memorandum and upon the invoice the average delivered purchase price of his stock of such commodity on hand or under control at the time they are contracted to be sold, or in cases where he purchased feeding stuffs other than grain or seed from another wholesale feed dealer the average delivered purchase price paid by the dealer who bought direct from the manufacturer, provided, however, that this rule shall not apply to sales of wheat mill feeds. (Issued Oct. 1, 1918; added to Dec. 31, 1918; repealed Jan. 10, 1919.)

NOTE.—Under the above rule the following notation should be made on the contract or sales memorandum and upon the invoice by every jobber of feed:

"This invoice is sold on the basis of an average purchase price of \$----- per ton. I have added a gross margin of \$----- per ton."

If the feed, other than grain or seed, has been purchased from another feed dealer, the following notation should be made:

"This invoice is sold on the basis of an average purchase price (when bought from manufacturer) of \$----- per ton.

"The first dealer added a gross margin of \$----- per ton and freight of \$----- per ton. I have added a gross margin of \$----- per ton."

C. SPECIAL REGULATIONS APPLYING TO WHEAT MILL FEEDS.

NOTE.—*Wheat mill-feed prices.*—All wheat millers should sell wheat mill feed on a fair-price schedule which is based on the Government wheat price and which is furnished to each mill. The rules require that upon request the mill furnish to any person a copy of its fair-price schedule as prescribed by the United States Food Administration. The purchaser is abetting a violation of the milling rules if he pays more for feed than is permitted thereby.

Rule 2 (as amended, effective Oct. 1, 1918). One commission not to exceed 50 cents a ton permitted on consigned feed.—No licensee selling the above feeds as a commission agent for the sale of consigned wheat mill feeds making sale, delivery, and collection shall charge more than a reasonable commission, not to exceed 50 cents per ton; and no licensee shall charge a commission on any of the above feeds on which a commission has already been charged. (Rule issued Feb. 13, 1918, provided brokerage not to exceed 25 cents per ton on wheat mill feed and prohibited double brokerage; changed Oct. 1, 1918, as noted here, by addition of commodities; repealed Dec. 31, 1918.)

NOTE.—Commission or brokerage must be paid out of the margin or price allowed by the regulations to the person paying the commission or brokerage and must not be added to price charged.

Rule 3 (as amended, effective Oct. 1, 1918). Reasonable margins fixed for dealers.—No licensee buying and selling the above feeds as a wholesaler or jobber shall charge more than a reasonable advance over the bulk price at mill of the particular feed sold (plus freight and cost of sacks), such advance not to exceed the following:

Shipment from mill or in transit, payment cash, demand draft, or sight draft, \$1 per ton.

Shipment from mill or in transit, sale on arrival, draft terms, \$1.50 per ton.

Sale ex-jobbers' warehouse, payment cash, sight draft or demand draft, \$2.50 per ton.

Sale ex-jobbers' warehouse upon arrival draft terms, \$3 per ton.

In making sales on credit not to exceed \$1 per ton may be added to the margin which could be charged if sold on arrival draft terms. (Rule issued Feb. 13, 1918, applied only to wheat mill feeds; changed Oct. 1, 1918, as noted here, by addition of commodities; repealed Jan. 10, 1919.)

C (a). SPECIAL REGULATIONS APPLYING TO RICE POLISH, RICE BRAN, AND DRIED BEET PULP.

NOTE.—Rice feed prices.—Under a uniform agreement with the United States Food Administrator, all rice millers have agreed to sell rice polish at not to exceed \$50 per ton, packed in customary manner, car lots, f. o. b. mills, and rice bran at not to exceed \$36 per ton, packed in customary manner, car lots, f. o. b. mills.

Beet pulp prices.—The United States Food Administration has fixed the following prices for beet pulp as returning a fair margin of profit to the beet-sugar manufacturers:

	Per ton.
Wet beet pulp, bulk, mill.....	\$0. 80
Wet beet pulp out of silo, bulk, mill.....	1. 25
Dried beet pulp, sacked, f. o. b. factory, in car lots.....	40. 00

Rule 1 (as amended Dec. 31, 1918). One brokerage not to exceed 25 cents a ton permitted.—No licensee selling the above feeds as a broker shall charge more than a reasonable brokerage, not to exceed 25 cents per ton. (Rule issued Feb. 13, 1918, provided brokerage not to exceed 25 cents per ton on wheat, mill feed, and prohibited double brokerage; changed Oct. 1, 1918, to include rice polish, rice bran, and dried beet pulp; changed Dec. 31, 1918, as noted here—wheat, mill feed not included; repealed Jan. 10, 1919.)

Rule 2 (repealed Dec. 31, 1918). One commission not to exceed 50 cents a ton permitted on consigned feed.

Rule 3 (as amended, effective Oct. 1, 1918). Reasonable margins fixed for dealers.—No licensee buying and selling the above feeds as a wholesaler or jobber shall charge more than a reasonable advance over the bulk price at mill of the particular feed sold (plus freight and cost of sacks), such advance not to exceed the following:

Shipment from mill or in transit, payment cash, demand draft or sight draft, \$1 per ton.

Shipment from mill or in transit, sale on arrival draft terms, \$1.50 per ton.

Sale ex-jobbers' warehouse, payment cash, sight draft or demand draft, \$2.50 per ton.

Sale ex-jobbers' warehouse, upon arrival draft terms, \$3 per ton.

In making sales on credit not to exceed \$1 per ton may be added to the margin, which could be charged if sold on arrival draft terms.

Rule 4. No resales of wheat mill feeds if total margin exceeds that prescribed in rule 3.—No wholesaler or jobber shall sell wheat mill feed to any person other than a retail dealer, manufacturer, or a consumer; provided, that he may sell to another wholesaler or jobber if in making such sales he states to the buyer the price which was paid bulk mill for the particular wheat mill feeds sold in such case. The buyer shall not sell such mill feed at more than the advances specified in rule 3 over the bulk mill price of the particular wheat mill feed so purchased from another wholesaler or jobber. (Issued Feb. 13, 1918; see rule 4 following; repealed Oct. 1, 1918.)

Rule 4 (repealed Oct. 1, 1918). No resales of wheat mill feeds if total margin exceeds that prescribed in rule 3.—Dealers in wheat mill feeds as well as other feeds are now governed as to resales by rules B—7, 8, 9, which see above.

D. SPECIAL REGULATIONS APPLYING TO DEALERS AND BUYERS IN COTTONSEED CAKE, COTTONSEED MEAL, COTTONSEED HULLS, PEANUT MEAL, AND SOYA-BEAN MEAL.

Rule 1. To be sold at reasonable advance over cost of particular lot sold.—The licensee shall sell the above commodities at not more than a reasonable advance over the actual cost of the particular commodity sold, without regard to the market or replacement value at the time of sale. (Issued Aug. 1, 1918;

repealed as to all except cottonseed products Jan. 10, 1919; repealed as to cottonseed products May 31, 1919.)

NOTE.—Until further notice the United States Food Administration will regard any resale of cottonseed meal or cake by jobbers or wholesalers at margins in excess of the following as unreasonable and in violation of the foregoing rule:

Shipment from mill or in transit, payment cash, demand draft or sight draft, \$1 per ton.

Shipment from mill or in transit, sale on arrival draft terms, \$1.50 per ton.

Sale ex-jobbers' warehouse, payment cash, sight draft, or demand draft, where meal or cake is actually handled through the warehouse, \$2.50 per ton.

Sale ex-jobbers' warehouse upon arrival draft terms where meal or cake is actually handled through the warehouses, \$3 per ton.

In making sales on credit except to other wholesalers not to exceed \$1 per ton may be added to the margin which could be charged if sold on arrival draft terms.

Rule 2. New crop cottonseed products not to be bought or sold before August 1.—The licensee shall not buy or sell cottonseed meal, cottonseed cake, or cottonseed hulls, made or to be made from new-crop cotton seed, grown in the United States before August 1 of the year in which such cotton seed is grown. (Issued Aug. 1, 1918; repealed Dec. 17, 1918.)

NOTE.—Under special rule B-3 these products can only be bought or sold after August 1, for 60 days' delivery.

Rule 3. Quotations based on protein or fat content.—Licensees who base quotations of cottonseed meal or cake upon either the protein or fat content, or combination thereof, shall not use any range of percentages, but shall state that the product offered contains not less than a definite percentage. (Issued Apr. 4, 1918; repealed Dec. 17, 1918.)

Note to rule 1.—Resales are forbidden by rule B-8 unless they divide the above margin.

Under the stabilization program of the United States Food Administration based on the price of cotton seed at the average agreed upon by the producers and the Food Administration, the following prices have been arranged for cottonseed meal, cake, and hulls:

Cottonseed meal and screened cracked cake 43 per cent protein in any quantity—\$57 per ton in sacks, f. o. b. all points of manufacture in Texas.

Cottonseed meal and screened cracked cake 40 per cent protein in any quantity—\$54 per ton in sacks, f. o. b. all points of manufacture in Oklahoma.

Cottonseed meal and screened cracked cake 36 per cent protein in any quantity—\$51 per ton in sacks, f. o. b. all points of manufacture in Imperial County, Calif., and \$55 per ton in sacks, f. o. b. all points of manufacture in Los Angeles County, Calif.

Cottonseed meal and screened cracked cake 36 per cent protein in any quantity—\$53 per ton in sacks, f. o. b. all points of manufacture in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, South Carolina, and Tennessee.

Bulk, loose, or slab cottonseed cake shall be not less than \$5 per ton, and bulk or loose cottonseed meal and screened cracked cake shall be not less than \$4 per ton under the prices specified above.

All cottonseed meal, screened cracked cake, bulk cake showing protein content other than above specified may be offered and sold at \$1 for each unit protein over or under the percentages as shown above: *Provided, however*, if cottonseed meal or cake upon delivery is ascertained to be of lower protein content than justified by price charged, any refund must be made at the rate of \$1.40 per unit protein. Each shipment or delivery shall be considered separately and without relation to the whole contract. This rule must not be construed in any way as an exception to the pure food act of 1906 or any of the amendments thereto.

Cottonseed hulls, bulk or loose, \$20 per ton, f. o. b. cars at point of manufacture.

Prices specified are net to manufacturer. Terms of sale are upon the basis of cash or its equivalent.

All manufacturers are urged to give preference in the sales of their products to producers and consumers.

Under the Food Administration regulations manufacturers of cottonseed meal, cake, and hulls are not permitted, to the exclusion of consumers, to make sales of their products to firms, factories, or corporations in which the corporation or the officers of the producing mill may be interested, without the written consent of the Food Administration.

G. SPECIAL REGULATIONS APPLYING TO MANUFACTURERS OF COMMERCIAL MIXED FEEDS.

PROFIT LIMITATION.

Under rule B-7 prescribing a reasonable profit on the sale of feeding stuffs, the following announcement has been issued applying to the manufacture of commercial mixed feeds:

Margins and profit for mixed-feed manufacturers.—The United States Food Administration considers that in the manufacture and sale of ground or crushed grains or ground hay, and of all commercial mixed feeds, the advance on any individual sale should not exceed the cost of materials, manufacturing, and overhead, plus 12½ per cent. The Food Administration will therefore consider unreasonable and as a violation of the foregoing rule any sale of such feeds in excess of this advance.

Furthermore, the Food Administration will consider an annual net earning or more than 6 per cent upon the total gross sales of any such feeding stuffs if the dealers' gross sales amount to \$100,000 or more per annum to be prima facie evidence of a violation of the rule which prohibits the taking of unreasonable profits.

The maximum margin on individual sales is purposely made wide because of the speculative character of the products which enter into such manufacture and the rapidly fluctuating prices which may prevail. As pointed out, the general average on all sales must not exceed 6 per cent advance over the cost of materials, manufacture, and overhead, nor does this 6-per cent limitation modify or abrogate the general principle contained in the Food Administration regulations that a licensee shall not earn more than a reasonable net profit on his capital invested. The manufacture of mixed feeds is a business which varies in many respects according to the type of feed, the expense of manufacture, and the rapidity of turnover. There are therefore some manufacturers to whom a 6 per cent annual net profit may give an unreasonable return on their investment. In such case they are obliged to sell at a lower average return.

One margin only.—Mixed feed manufacturers are not allowed directly or indirectly to take any feed dealer's margin on their mixed feed. On feed which they buy and sell without mixing or processing in any manner they may take only the feed dealers' margins, and not that permitted to mixed feed manufacturers. Feed manufacturers may not establish any jobbing department for feeds of their own manufacture in order to obtain additional profits.

Blackstrap molasses.—The attention of feed manufacturers is called to the fact that refiners and manufacturers of sugar in the United States have been forbidden to sell blackstrap molasses in bulk at more than 18 cents per gallon, or in barrels, at more than 23 cents per gallon. The prices named are f. o. b. cars at primary markets or port of entry, or factory, net cash in 10 days without discount, and shall include brokerage and any profit taken by distributors in tank cars direct from the refiners, but shall not include freight or tank-car charges.

Feed manufacturers should be able to buy blackstrap molasses at the above prices in tank cars, paying in addition thereto only the freight and tank-car charges. An additional margin of 10 per cent is permitted to dealers in barrels who handle such barrels through their warehouse. The same rules apply to imported blackstrap molasses.

J. SPECIAL REGULATIONS APPLYING TO RETAILERS OF FEED.

Rule 1 (as amended Dec. 31, 1918). Margin over cost of particular feed prescribed on feeds whose price is stabilized.—No retailer of rice polish, rice bran, dried beet pulp, or cottonseed products shall charge more than a reasonable advance over the delivered price of the particular feeds sold. (Rule issued Oct. 1, 1918, included wheat mill feeds. Changed Dec. 31, 1918, as noted here, wheat mill feed not included. Repealed Jan. 10, 1919, as to all except cottonseed products. Repealed May 31, 1919, as to cottonseed products.)

NOTE.—Under the above rule the Food Administration will consider any marging in excess of those indicated in the following schedule as unreasonable in case of rice feed, and dried beet pulp. These schedules are maximum, and do not justify charges in excess of those customarily charged in any particular district or case where the lower charges will insure a reasonable profit.

1. Where one or more farmers purchase in advance of delivery, in full carloads, take delivery at car and pay cash when retail dealer is required to meet sight draft, \$1 per ton, plus demurrage, if any.

2. Where one or more farmers purchase in advance of delivery, in full carloads, take delivery at car and pay for it on delivery, \$1.50 per ton, plus demurrage, if any.

3. Where a farmer purchases and takes delivery at car and pays for it on delivery in ton lots or more but less than car lots, \$2 per ton.

4. Where farmer purchases and takes delivery at car and pays for it on delivery in lots less than one ton, \$2.50 per ton.

5. Sale ex-warehouse in lots of one ton or more, \$4 per ton.

6. Sale ex-warehouse in lots of less than one ton, \$5 per ton.

7. One dollar may be added to the foregoing margins when sale is made on credit, or at dealer's option the legal rate of interest may be charged.

8. One dollar shall be deducted from the margins prescribed in 5 and 6 when the retailer buys on credit and the jobber's margin is thereby increased \$1 a ton.

Cottonseed products.—The above margins will also apply to the sale of cottonseed meal, cake, and hulls by retail feed dealers, except where different margins have been prescribed by the Federal food administrator of the State where the dealer is located.

Margins and profits for retail dealers in feeding stuffs.—The United States Food Administration considers that in sales of feeding stuffs at retail the advance on any individual sale should not in any case exceed the purchase price delivered at warehouse door, plus 15 per cent. Where delivery is made to the consumer, reasonable cartage charges may be added. The Food Administration will therefore consider any sale of feeding stuffs in excess of this advance as a violation of rule B-7. This margin also applies to the sale of corn, oats, rye, or barley at retail as feed, but not to wheat mill feeds, cottonseed products, rice products, or dried beet pulp. Special margins for cottonseed products, rice products, and beet pulp are prescribed above.

Furthermore, the Food Administration will consider an annual net earning by any retail dealer of feeding stuffs of more than 6 per cent upon the total gross sales if his gross sales of feeding stuffs amount to \$100,000 or more per annum to be prima facie evidence of a violation of the rule which prohibits the taking of unreasonable profits. This 6 per cent will be calculated on the sales of all feeding stuffs, including those specially listed above and also wheat mill feeds.

3. FUELS.

The basis for all of the formal regulations over fuel prices during the war lay in section 25 (commonly known as the Pomerene amendment) of the food-and-fuel control act which was made law on August 10, 1917.¹ An informal control

¹ There follows in full the section of the food-and-fuel control act of August 10, 1917, which pertains to control over fuel prices:

SEC. 25. That the President of the United States shall be, and he is hereby, authorized and empowered, whenever and wherever in his judgment necessary for the efficient prosecution of the war to fix the price of coal and coke wherever and whenever sold, either by producer or dealer, to establish rules for the regulation of and to regulate the method of production, sale, shipment, distribution, apportionment, or storage thereof among dealers and consumers, domestic or foreign; said authority and power may be exercised by him in each case through the agency of the Federal Trade Commission during the war or for such part of said time as in his judgment may be necessary.

That if, in the opinion of the President, any such producer or dealer fails or neglects to conform to such prices or regulations, or to conduct his business efficiently under the regulations and control of the President as aforesaid, or conducts it in a manner prejudicial to the public interest, then the President is hereby authorized and empowered in every such case to requisition and take over the plant, business, and all appurtenances thereof belonging to such producer or dealer as a going concern and to operate or cause the same to be operated in such manner and through such agency as he may direct during the period of the war or for such part of said time as in his judgment may be necessary.

That any producer or dealer whose plant, business, and appurtenances shall have been requisitioned or taken over by the President shall be paid a just compensation for the use thereof during the period that the same may be requisitioned or taken over as aforesaid, which compensation the President shall fix or cause to be fixed by the Federal Trade Commission.

That if the prices so fixed, or if, in the case of taking over or requisitioning of the mines or business of any such producer or dealer the compensation therefor as determined by the provisions of this act be not satisfactory to the person or persons entitled to receive the same, such person shall be paid seventy-five per centum of the amount so determined, and shall be entitled to sue the United States to recover such further sum as added to said seventy-five per centum, will make up such amount as will be just compensation in the manner provided by section twenty-four, paragraph twenty, and section one hundred and forty-five of the Judicial Code.

While operating or causing to be operated any such plants or business the President is authorized to prescribe such regulations as he may deem essential for the employment, control, and compensation of the employees necessary to conduct the same.

Or if the President of the United States shall be of the opinion that he can thereby better provide for the common defense, and whenever, in his judgment, it shall be necessary for the efficient prosecution of the war, then he is hereby authorized and empowered to require any or all producers of coal and coke, either in any special area or in any special coal fields, or in the entire United States, to sell their products only to the United States through an agency to be designated by the President, such agency to regulate the resale of such coal and coke, and the prices thereof, and to establish rules for the regulation of and to regulate the methods of production, shipment, distribution, apportionment, or storage thereof among dealers and consumers, domestic or foreign, and to make payment of the purchase price thereof to the producers thereof or to the person or persons legally entitled to said payment.

That within fifteen days after notice from the agency so designated to any producer of coal and coke that his, or its, output is to be so purchased by the United States as hereinbefore described, such producer shall cease shipments of said product on his own account and shall transmit to such agency all orders received and unfilled, or partially unfilled, showing the exact extent to which shipments have been made thereon, and thereafter all shipments shall be made only on authority of the agency designated by the President, and thereafter no such producer shall sell any of said products except to the United States through such agency, and the said agency alone is hereby authorized and empowered to purchase during the continuance of the requirement the output of such producers.

That the prices to be paid for such products so purchased shall be based upon a fair and just profit over and above the cost of production, including proper maintenance and depletion charges, the reasonableness of such profits and cost of production to be determined by the Federal Trade Commission; and if the prices fixed by the said commission

was, however, previously exercised over anthracite prices in particular by the Federal Trade Commission and over bituminous prices by the coal production committee of the Council of National Defense. The President, by authority from the food and fuel control act, issued a provisional schedule of bituminous coal prices on August 21, 1917, another of anthracite coal prices on August 23, and also named Mr. Harry A. Garfield as United States Fuel Administrator on August 23, 1917. The whole body of fuel-price controls thereafter were administered through the United States Fuel Administration at Washington.

The United States Fuel Administration was concerned with distribution, production, conservation, and price regulation over domestic coal, but this inquiry pertains only to the price controls exercised by it. The price regulations which are tabulated here cover in full the field marked out by the legal division of the Fuel Administration, as compiled officially by them in "general orders, regulations, and rulings of the United States Fuel Administration." They have been brought down to date by assistance from the Fuel Administration, since the above official compilation covers only the rulings from August 23, 1917, to January 1, 1919.

of any such product purchased by the United States as hereinbefore described be unsatisfactory to the person or persons entitled to the same, such person or persons shall be paid seventy-five per centum of the amount so determined and shall be entitled to sue the United States to recover such further sum as added to said seventy-five per centum will make up such amount as will be just compensation in the manner provided for by section twenty-four, paragraph twenty, and section one hundred and forty-five of the Judicial Code.

All such products so sold to the United States shall be sold by the United States at such uniform prices, quality considered, as may be practicable, and as may be determined by said agency to be just and fair.

Any moneys received by the United States for the sale of any such coal and coke may, in the discretion of the President, be used as a revolving fund for further carrying out the purposes of this section. Any moneys not so used shall be covered into the Treasury as miscellaneous receipts.

That when directed by the President, the Federal Trade Commission is hereby required to proceed to make full inquiry, giving such notice as it may deem practicable, into the cost of producing under reasonably efficient management at the various places of production the following commodities, to wit, coal and coke.

The books, correspondence, records, and papers in any way referring to transactions of any kind relating to the mining, production, sale, or distribution of all mine operators or other persons whose coal and coke have or may become subject to this section, and the books, correspondence, records, and papers of any person applying for the purchase of coal and coke from the United States shall at all times be subject to inspection by the said agency, and such person or persons shall promptly furnish said agency any data or information relating to the business of such person or persons which said agency may call for, and said agency is hereby authorized to procure the information in reference to the business of such coal-mine operators and producers of coke and customers therefor in the manner provided for in sections six and nine of the act of Congress approved September twenty-six, nineteen hundred and fourteen, entitled "An act to create a Federal Trade Commission, to define its powers and duties, and for other purposes," and said agency is hereby authorized and empowered to exercise all the powers granted to the Federal Trade Commission by said act for the carrying out of the purposes of this section.

Having completed its inquiry respecting any commodity in any locality, it shall, if the President has decided to fix the prices at which any such commodity shall be sold by producers and dealers generally, fix and publish maximum prices for both producers of and dealers in any such commodity, which maximum prices shall be observed by all producers and dealers until further action thereon is taken by the commission.

In fixing maximum prices for producers the commission shall allow the cost of production, including the expense of operation, maintenance, depreciation, and depletion, and shall add thereto a just and reasonable profit.

In fixing such prices for dealers the commission shall allow the cost to the dealer and shall add thereto a just and reasonable sum for his profit in the transaction.

The maximum prices so fixed and published shall not be construed as invalidating any contract in which prices are fixed, made in good faith, prior to the establishment and publication of maximum prices by the commission.

Whoever shall, with knowledge that the prices of any such commodity have been fixed as herein provided, ask, demand, or receive a higher price, or whoever shall, with knowledge that the regulations have been prescribed as herein provided, violate or refuse to conform to any of the same, shall, upon conviction, be punished by fine of not more than \$5,000, or by imprisonment for not more than two years, or both. Each independent transaction shall constitute a separate offense.

Nothing in this section shall be construed as restricting or modifying in any manner the right the Government of the United States may have in its own behalf or in behalf of any other Government at war with Germany to purchase, requisition, or take over any such commodities for the equipment, maintenance, or support of armed forces at any price or upon any terms that may be agreed upon or otherwise lawfully determined.

The formal control over prices of coal and coke was discontinued by the Fuel Administration on January 31, 1919, and the orders governing the oil industry were set aside on May 15, 1919.

Regulations affecting the prices of fuel are here arranged under the following heads in the sequence indicated: Anthracite coal, bituminous coal, coke, jobbers' margins and distributors' commissions, retail margins, and petroleum stabilization.

ANTHRACITE COAL.

The maximum prices of anthracite coal were provisionally fixed by order of the President on August 23, 1917. The prices named in that order, effective on September 1, 1917, were made applicable to the following specific producers: Philadelphia & Reading Coal & Iron Co.; Lehigh Coal & Navigation Co.; Lehigh & Wilkes-Barre Co.; Hudson Coal Co.; Delaware & Hudson Co.; Scranton Coal Co.; Lehigh Valley Coal Co.; Coxe Bros. & Co.; Pennsylvania Coal Co.; Hillside Coal & Iron Co.; Delaware, Lackawanna & Western Railroad Co.; Delaware, Lackawanna & Western Coal Co.; Susquehanna Coal Co.; Susquehanna Collieries Co.; Lytle Coal Co.; M. A. Hanna Coal Co. Other producers were not to exceed the scheduled fixed prices by more than 75 cents per ton, but any producer rescreening at Atlantic or Lake ports for shipment by water might increase the price by not more than 5 cents per ton.

All anthracite prices, unless otherwise noted, were maximum prices per ton of 2,240 pounds, f. o. b. cars at mine. The anthracite prices scheduled do not include allowance for a wage increase under the President's order of December 5, 1917. The increase of 35 cents per ton provided in that order should be added to all except the Arkansas prices after December 5, 1917.

A digest of the prices contained in the President's order, and the later modifications and additions made by the Fuel Administrator, follows:¹

SCHEDULE OF ANTHRACITE BASE PRICES.

Commodity.	Date when effective.	Price fixed per ton.	Commodity.	Date when effective.	Price fixed per ton.
White-ash grade:			Red-ash grade—Contd.		
Broken.....	Sept. 1, 1917	\$4.55	Chestnut.....	Sept. 1, 1917	\$4.90
Egg.....	do.....	4.45	Pea.....	do.....	4.10
Stove.....	do.....	4.70	Do.....	Oct. 1, 1917	3.50
Chestnut.....	do.....	4.80	Lykens Valley grade:		
Pea.....	do.....	4.00	Broken.....	Sept. 1, 1917	5.00
Do.....	Oct. 1, 1917	3.40	Egg.....	do.....	4.90
Red-ash grade:			Stove.....	do.....	5.30
Broken.....	Sept. 1, 1917	4.75	Chestnut.....	do.....	5.30
Egg.....	do.....	4.65	Pea.....	do.....	4.35
Stove.....	do.....	4.90	Do.....	Oct. 1, 1917	3.75

¹ Prices of all Arkansas anthracite, except slack, were subject to the following reductions per ton for the summer of 1918: April, 90 cents; May, 75 cents; June, 60 cents; July, 45 cents; August, 30 cents; September, 15 cents. Coal at docks on Lake Michigan or Lake Superior were subject to a general summer reduction of 30 cents per gross ton until September 1, 1918. Coal prices at Lake ports were based on freight rates effective June 25, 1918, from the mines to Lake Erie ports. Virginia and West Virginia anthracite was subject to a summer reduction of 30 cents per net ton from April 1 to September 1, 1918.

SCHEDULE OF ANTHRACITE BASE PRICES—Continued.

Commodity.	Date when effective.	Price fixed per ton.		Commodity.	Date when effective.	Price fixed per ton.	
		Bernice mines.	Spadra field.			Bernice mines.	Spadra field.
Arkansas mines:				Arkansas mines—Continued.			
Grate.....	Jan. 5, 1918	\$7.30	\$6.80	Pea.....	May 15, 1918	\$6.75	\$5.25
Egg.....	do.....	7.55	6.80	Buck.....	do.....	2.85	.....
Stove.....	do.....	8.80	.....	Slack.....	do.....	2.50	2.50
No. 4.....	do.....	8.30	7.30	Grate.....	.....	8.75	8.75
Pea.....	do.....	6.30	4.80	Egg.....	.....	2.00	8.75
Buck.....	do.....	2.85	.....	Stove.....	.....	9.75	.....
Slack.....	do.....	2.50	2.50	No. 4.....	.....	9.75	9.25
Grate.....	May 15, 1918	7.75	7.25	Pea.....	.....	6.75	5.25
Egg.....	do.....	8.00	7.25	Buck.....	.....	4.75	.....
Stove.....	do.....	8.75	.....	Slack.....	.....	2.50	2.50
No. 4.....	do.....	8.75	7.75				
Commodity.	Date when effective.	Price fixed per ton.		Commodity.	Date when effective.	Price fixed per ton.	
Coal at Great Lake docks:				Virginia—Continued.			
Broken.....	June 25, 1918	\$10.20		Buckwheat.....	July 22, 1918	\$1.55	
Egg.....	do.....	10.10		Culm.....	do.....	.90	
Stove.....	do.....	10.35		Briquettes.....	do.....	5.30	
Nut.....	do.....	10.45		West Virginia:			
Pea.....	do.....	8.80		Egg.....	Aug. 29, 1918	5.40	
Virginia:				Stove.....	do.....	5.75	
Egg.....	July 22, 1918	5.40		Nut.....	do.....	5.75	
Stove.....	do.....	5.75		Briquettes.....	do.....	5.30	
Nut.....	do.....	5.75		Pea and smaller sizes.....	do.....	4.60	
Pea.....	do.....	4.60					
Commodity. ¹		Price fixed per ton.		Commodity.		Price fixed per ton.	
		Companies.	Individuals.			Companies.	Individuals.
White-ash grade:				Red-ash grade—Continued.			
Broken.....		\$5.95	\$6.70	Nut.....		\$6.30	\$7.05
Egg.....		5.85	6.60	Pea.....		4.90	5.65
Stove.....		6.10	6.85	Lykens Valley grade:			
Nut.....		6.20	6.95	Broken.....		6.40	7.15
Pea.....		4.80	5.55	Egg.....		6.30	7.05
Red-ash grade:				Stove.....		6.70	7.45
Broken.....		6.15	6.90	Nut.....		6.70	7.45
Egg.....		5.45	6.20	Pea.....		5.15	5.90
Stove.....		6.30	7.05				

¹ Effective on coal mined on or after Nov. 1, 1918.

NOTE.—The anthracite price schedule has been revised to meet increased labor costs and includes only the actual additional cost of a recent adjustment of anthracite wages.

The sizes scheduled comprise 70.6 per cent of the total anthracite output. Remaining anthracite sizes, comprising 29.4 per cent of the output are nearly stationary at existing quotations, and no price adjustment was made as to them.

Under order of November 16, 1918, maximum prices for the different sizes of anthracite smaller than "pea," f. o. b., mines, were made that for "pea" size less 50 cents per gross ton of 2,240 pounds.

BITUMINOUS COAL.

The maximum prices of bituminous coal at the mine were tentatively fixed for the entire country by order of the President on August 21, 1917.

All bituminous coal prices were f. o. b. mine basis, per ton of 2,000 pounds, and do not include allowance for wage increase under the President's order of October 27, 1917. An increase of 45 cents per net ton, granted in that order, should be added to all prices, except those for coal mined in Alabama.

In Alabama a separate and satisfactory wage agreement was made between mine operators and mine workers and approved by the Fuel Administrator, modifying the terms of the President's order of October 27, 1917. This agreement became effective February 6, 1918. On April 20 new terms were agreed upon in Alabama and the allowance of 45 cents per net ton, as of the order of October 27, 1917, became effective May 15, 1918.

On May 24, 1918, there was a general order reducing all prices for bituminous coal, fixed to that date, by the sum of 10 cents for each net ton of 2,000 pounds.

A digest of the schedule of prices contained in the President's order and subsequent amendments made by the United States Fuel Administrator follow:

SCHEDULE OF BITUMINOUS BASE PRICES.

[Prices fixed by the President on Aug. 21, 1917.]

District.	Run of mine.	Prepared sizes.	Slack or screenings.
Alabama:			
Big Seam.....	\$1.90	\$2.15	\$1.65
Pratt, Jaeger, and Corona.....	2.15	2.40	1.90
Cahaba and Black Creek.....	2.40	2.65	2.15
Arkansas.....	2.65	2.90	2.40
Colorado.....	2.45	2.75	2.20
Illinois.....	1.95	2.20	1.70
Third vein.....	2.40	2.65	2.15
Indiana.....	1.95	2.20	1.70
Iowa.....	2.70	2.95	2.45
Kansas.....	2.55	2.80	2.30
Kentucky.....	1.95	2.20	1.70
Jellico.....	2.40	2.65	2.15
Maryland.....	2.00	2.25	1.75
Missouri.....	2.70	2.95	2.45
Montana.....	2.70	2.95	2.45
New Mexico.....	2.40	2.65	2.15
Ohio:			
Thick vein.....	2.00	2.25	1.75
Thin vein.....	2.35	2.60	2.10
Oklahoma.....	3.05	3.30	2.80
Pennsylvania.....	2.00	2.25	1.75
Tennessee:			
Eastern.....	2.30	2.55	2.05
Jellico.....	2.40	2.65	2.15
Texas.....	2.65	2.90	2.40
Utah.....	2.60	2.85	2.35
Washington.....	3.25	3.50	3.00
West Virginia.....	2.00	2.25	1.75
Wyoming.....	2.50	2.75	2.25

MODIFICATIONS TO THE PRESIDENT'S PRICES MADE BY THE UNITED STATES FUEL ADMINISTRATOR.

District.	Date when effective.	Run of mine.	Prepared sizes.	Slack or screenings.
Alabama:				
Big Seam.....	Oct. 1, 1917	\$2.15	\$2.45	\$1.85
Cahaba, Black Creek, Brookwood, Blue Creek.....	do.....	2.85	3.10	2.45
Pratt, Jaeger, Jefferson, Nickel Plate, and Coal City.....	do.....	2.35	2.65	2.05
Corona.....	do.....	2.40	2.75	2.05
Montavello.....	do.....	2.40	4.00	2.15
Sunlight Mining Co., in Walker County.....	Dec. 1, 1917	2.85	3.10	2.45
Benoit Coal Mining Co. and Cordova Fuel Co., in Walker County.....	Dec. 6, 1917	2.85	3.10	2.45

¹ Temporary schedules were published for the summer months allowing reductions, as follows:

1. Colorado: Domestic coal, domestic field—April, 70 cents; May, 50 cents; June, 35 cents; July, 15 cents. Steam coal, Trinidad district—April, 40 cents; May, 30 cents; June, 20 cents; July, 10 cents.

2. Arkansas and Oklahoma: March, 75 cents; April, 60 cents; May, 45 cents; June, 30 cents; July, 15 cents.

3. New Mexico: April, 50 cents; May, 40 cents; June, 30 cents; July, 20 cents; August, 10 cents.

4. Texas: April, 75 cents; May, 60 cents; June, 45 cents; July, 30 cents; August, 15 cents.

MODIFICATIONS TO THE PRESIDENT'S PRICES MADE BY THE UNITED STATES FUEL ADMINISTRATOR—Continued.

District.	Date when effective.	Run of mine.	Prepared sizes.	Slack or screenings.
Alabama—Continued.				
Linn mines of Monroe-Warrior Coal & Coke Co., to supply Macon, Ga.....	Dec. 10, 1917	\$3.50	\$4.00	\$3.10
Gilbert Coal Mining Co., Walker County, and the Mount Carmel seam.....	Dec. 20, 1917	2.85	3.10	2.45
Climax seam, in or about Maylene, Shelby County.....	Jan. 17, 1918	4.25	4.50	2.15
Big Seam, Upper Bench supersedes orders of Dec. 6 and Dec. 20, 1917.....	do.....	2.35	2.65	2.05
Cahaba Southern Coal Mining Co., Hargrove, Bibb County.....	Feb. 4, 1918	2.85	3.70	2.45
District No. 1, Big Seam group.....	Aug. 23, 1918	2.00	2.30	1.95
District No. 2, Cahaba group, Black Creek group.....	do.....	3.00	3.30	2.65
District No. 3, Pratt group.....	do.....	2.40	2.60	2.00
District No. 4, Helena and Harkness seams and coal mined by No. 2 Belle Ellen mine in Youngblood seam.....	do.....	2.45	2.75	2.25
District No. 5, mines in the Climax seam, in or about Maylene, Shelby County.....	do.....	4.15	4.40	2.05
Montovello Mining Co.....	Oct. 7, 1918	3.65	3.90	3.15
Warrior Pratt Coal Co.....	Oct. 18, 1918	2.25	2.50	2.00
West Helena Coal Co.....	do.....	3.00	3.30	2.65
Montovello Stroven Coal Co.....	Nov. 6, 1918	3.65	3.90	2.65
Yolande Coal & Coke Co.....	Dec. 15, 1918	3.00	3.30	2.65
Arkansas:				
Thin vein seam, Hartford, Greenwood, Midland, Hackett, and Denning.....	Oct. 1, 1917	3.05	3.40	2.40
Paris field.....	Oct. 27, 1917		4.50	2.00
Johnson, Franklin, and Sebastian Counties, except the Excelsior district.....	Mar. 29, 1918	3.70	4.60	2.40
Logan and Scott Counties and Excelsior district of Sebastian County, namely, mines on the Midland Valley Railroad north of Montreal Junction and east of Hackett and west of, but not at, Greenwood.....	do.....	4.35	5.15	2.60
Colorado:				
Walsenberg, Canon City, Routt, Garfield, Gunnison, Durango, Mesa, Pitkin, Montezuma, Delta, Montrose and Rio Blanca (domestic coal).....	Oct. 10, 1917	3.00	4.00	1.50
Trinidad (steam coal).....	do.....	2.75	3.25	2.00
Do.....	Mar. 11, 1918	2.35	3.25	1.65
Northern field and El Paso (lignite).....	Oct. 10, 1917	2.45	3.50	1.00
Do.....	Nov. 22, 1917	2.45	3.50	1.25
Domestic (domestic coal).....	Mar. 11, 1918	2.25	3.50	1.25
Lignite coal.....	do.....	2.25	3.25	1.00
Florence, Fremont County, Williamsburg Slope Coal Co.....	May 1, 1918	2.25	4.25	1.25
Walsenberg district: Aztec Coal Mining Co., Caprock Fuel Co., Monument Valley Fuel Co., Caddell & Carlson, Premium Mining Co., Rugby Fuel Co., Gordon Coal Co., Black Canon Coal & Fuel Co., Geo. McNally Coal Co., Black Hawk Coal Co., Ideal Fuel Co., Green Coal Co., Minnequa Coal Co.....	June 14, 1918	2.15	4.15	1.15
Nut..... \$3.65				
Canon City: Royal Gorge mine, Gibson Lumber & Fuel Co.....	June 15, 1918	2.05	4.15	1.40
Nut..... \$3.65				
Canon City district: Radiant mine.....	Aug. 20, 1918	2.15	4.15	1.15
Walsenberg district: Ravenwood mine, Rapson Mining Co., Cedar Hill Coal & Coke Co., Oakdale Coal Co.....	do.....	2.15	4.15	1.15
Trinidad district: Gray Creek mine, of the Victor Am. Fuel Co., Empire mine of the Empire Mining Co.....	Aug. 30, 1918	3.00	3.15	1.55
Canon City district: Wolf Park Coal Co.....	do.....	2.15	4.15	1.15
Reliance mine by Alliance Coal Co.....	Oct. 8, 1918	2.15	4.15	1.15
Temple Fuel Co.....	Nov. 18, 1918	2.15	3.40	1.55
Georgia.....	Apr. 5, 1918	3.25	3.50	3.20
Illinois:				
McLean County Coal Co., retail only.....	Oct. 27, 1917		4.00	1.70
Counties of Peoria, Fulton, and Tazewell.....	Dec. 8, 1917	2.30	2.55	2.05
Illinois (third vein) northern field (conditional) and Matherville field, Mercer County.....	do.....	2.65	2.90	2.40
Moweaqua Coal Mining & Manufacturing Co., Moweaqua, Christian County.....	Feb. 13, 1918	2.40	2.65	2.15
Assumption Coal & Mining Co., Assumption, Christian County.....	do.....	3.00	4.55	2.15
Spoon River Colliery Co., Ellisville (listed in the northern Illinois field).....	do.....	2.65	2.90	2.40
District No. 1: Mercer, Bureau, Kankakee, La Salle, Grundy, Will Putnam, Marshall, Livingston, Woodford, and McLean Counties.....	Mar. 23, 1918	2.65	2.90	2.40

MODIFICATIONS TO THE PRESENT'S PRICES MADE BY THE UNITED STATES FUEL ADMINISTRATOR—Continued.

District.	Date when effective.	Run of mine.	Prepared sizes.	Slack or screenings.
Illinois—Continued.				
District No. 2: Rock Island, Henry, Warren, Knox, Stark, Peoria, Hancock, McDonough, Henderson, Fulton, Tazewell, and Schuyler Counties.....	Mar. 23, 1918	\$2.40	\$2.60	\$2.10
District No. 3: Menard, Logan, Dewitt, Champaign, Vermilion, Sangamon, Macon, Pratt, Christian, Moultrie, Shelby, Greene, Macoupin and Montgomery Counties, and Madison County north of the latitude of Alton; also all mines not included in other rulings.....	.....do.....	2.00	2.20	1.70
District No. 4: Bond, St. Clair, Monroe, and Randolph Counties, and Madison County south of the latitude of Alton, and Clinton, Washington, and Perry Counties, not including mines along the line of Illinois Central Railroad between Vandalia and Carbondale.....	.....do.....	2.00	2.20	1.70
District No. 5: Jackson County, not including mines on the line of the Illinois Central Railroad between Carbondale and Duquoin.....	.....do.....	2.40	2.60	2.10
District No. 6: Marion, Jefferson, Franklin, Williamson, Johnson, Hamilton, Saline, White, Gallatin, and mines along the main line of the Illinois Central Railroad between Vandalia and Carbondale in Clinton, Washington, Perry, and Jackson Counties.....	.....do.....	2.00	2.20	1.70
Macon County.....	May 1, 1918	2.25	2.50	1.70
Latham Coal & Mining Co., Logan County.....	Oct. 1, 1918	2.05	2.25	1.75
Searls Coal Co., in Williamson County, passing through a 1½-inch screen.....	Jan. 6, 1919	.....	.....	1.60
Indiana:				
Brazil block.....	Oct. 1, 1917	.....	2.95	1.70
Indiana.....				
Brazil block.....	May 1, 1918	2.00	2.20	1.70
Essanbee Mine Co., Vermillion County.....	.....do.....	2.95	3.25	1.70
Atlas Mining Co. at Linton Summit mine, Greene County.....	Aug. 19, 1918	2.30	2.50	2.00
Iowa:				
Appanoose, Wayne, Boone, and Webster Counties....	Sept. 25, 1918	2.20	2.40	1.90
Appanoose, Wayne, Boone, Webster, and Marion Counties.....	Oct. 1, 1917	3.15	3.40	2.90
Marion County.....	Mar. 11, 1918	2.75	3.10	2.00
Kansas:				
Mines at Leavenworth take prices for Platte County, Mo.....	Apr. 5, 1918	2.70	2.95	2.45
Osage County.....	Oct. 1, 1917	3.15	3.40	2.90
Do.....	.....do.....	2.55	4.00	2.30
Cherokee and Crawford Counties, except shaft mines in Lightning Creek or upper thin vein and any mining operations in the State not covered by other rulings.....	Dec. 1, 1917	3.05	4.50	2.80
Shaft workings in the Lightning Creek or upper thin vein in Cherokee and Crawford Counties.....	Apr. 20, 1918	2.70	2.95	2.45
Osage, Franklin, and Linn Counties.....	.....do.....	3.65	3.95	2.45
Leavenworth County.....	.....do.....	3.50	4.50	2.80
Cherokee and Crawford Counties.....	.....do.....	3.40	3.65	2.90
Nut run or stoker coal.....	Aug. 3, 1918	.....	.....	.....
Mill coal.....		\$3.05		2.95
Kentucky:				
Whitley, Knox, Clay, and Bell Counties, Blue Gem district.....		2.95		.....
McCreary, Pulaski, Rockcastle, Jackson, Lee, Wolfe, Morgan, Lawrence, Johnson, Martin, Laurel, Whitley, Clay, Omsley, Knox, Bell, Breathitt, Perry, Leslie, Harlan, Magoffin, Boyd, Carter, Pike, and all of Floyd, Knott, and Letcher Counties excepting coal produced from the thick-vein Elkhorn district in these three counties.....	Nov. 6, 1917	3.55	3.80	2.30
Whitley, Knox, Bell, and McCreary Counties, other than the Blue Gem district (conditional).....	Oct. 11, 1917	2.40	2.65	2.15
Harlan, Perry, and Letcher Counties and operations in Pike County on the Levisa Fork of the Big Sandy River.....	Dec. 3, 1917	2.65	2.90	2.40
East of the 85th degree of longitude except Harlan, Perry, Letcher, Pike, and Martin Counties.....	Apr. 5, 1918	2.20	2.45	1.95
Thacker district; operations in Pike County on the watershed of the Tug Fork of the Big Sandy River east of Williamson, on the Norfolk & Western Ry..	.....do.....	2.65	2.90	2.40
Kenova district; operations in Pike and Martin Counties on the watershed of the Tug Fork of the Big Sandy River west of Williamson, on the Norfolk & Western Ry.....	Apr. 20, 1918	2.30	2.55	2.05
	.....do.....	2.30	2.55	2.05

MODIFICATIONS TO THE PRESIDENT'S PRICES MADE BY THE UNITED STATES FUEL ADMINISTRATOR—Continued.

District.	Date when effective.	Run of mine.	Prepared sizes.	Slack or screenings.
Kentucky—Continued.				
Blue Gem coal produced in Knox and Whitley Counties by operators who are members of the Tri-County Blue Gem Coal Operators' Association.....	May 1, 1918	\$3.55	\$3.80	\$2.40
Wallen Jellico Coal Co., in Whitley County.....	Aug. 19, 1918	3.25	3.50	2.50
Elkhorn City Coal Co. and Guthrie Coal Co., in Pike County.....	.....do.....	2.55	2.80	2.30
District No. 1, west of the 85th degree of longitude....	Aug. 23, 1918	1.90	2.15	1.60
District No. 2, Harlan, Letcher, and Perry Counties, except the operations in Perry County included in district No. 3.....	.....do.....	2.10	2.35	1.85
Loony Creek Coal Co., Harlan County.....	Oct. 5, 1918	2.55	2.80	2.30
Reliance Coal & Coke Co., at the Glowmar mine in Perry County.....	.....do.....	2.55	2.80	2.30
Blue Gem coal mined in Knox and Whitley Counties by operators who are members of the Tri-County Blue Gem Coal Operators' Association.....	Oct. 28, 1918	2.60	2.85	2.30
Clover Fork, Golden Ash, King Harlan, Lick Branch, Wilson Berger, East Harlan, R. C. Tway, White Star, Harlan Fox, Wallins Creek, Harlan Gas, Creech, Banner Fork, McComb, Bear Branch, Kentucky Harlan, Middleton, or Kentucky Coal Co. in Harlan County.....	.....do.....	2.15	2.40	1.85
Utility Gas Coal Co., Kanawha Knox Coal Co., Bennetts Fork Coal Co., J. B. Blue Gem Coal Co., J. B. Jellico Coal Co., J. B. Straight Creek Coal Co., Palge Jellico Coal Co., and Pine Ridge Coal Mining Co. in Bell County.....	.....do ¹	2.60	2.85	2.30
Spring Branch Coal Co., High Point Coal Co., Harlan-Kellioka Coal Co., J. L. Smith Coal Co., Adair Mining Co., Baileys Creek Coal Co., High Splint Coal Co., Wilson Berger Coal Co., and Black Mountain Coal Corporation in Harlan County.....	.....do.....	2.15	2.40	1.85
Blue Gem Coal mined in Knox and Whitley Counties by operators who are members of the Tri-County Blue Gem Coal Operators' Association.....	Dec. 7, 1918	3.30	4.05	2.30
Nut and slack through 1½-inch bars.....		\$2.55		
District No. 3: East of the 85th degree of longitude, excepting Harlan, Letcher, and Martin Counties; that part of Pike County on the watershed of the Tug Fork of the Big Sandy River, and that part of Perry County included in district No. 2, but including the operations in Perry County of Hazard Coal Co., Diamond Block Coal Co., Coneva Coal Corporation, Storm King Coal Co., C. H. McDonald Coal Co., Four Seam Block Coal Co., Daniel Boone Coal Co., Blue Grass Coal Corporation, Columbus Mining Co., No. 4 Coal Co., and Walker's Branch Mining Co.....	Aug. 23, 1918	2.55	2.80	2.30
District No. 4, or Thacker: Operations in Pike County on the watershed of the Tug Fork of the Big Sandy River east of Williamson on the Norfolk & Western R. R.....	.....do.....	2.20	2.45	1.95
District No. 5, or Kenova: Martin County, and operations in Pike County on the watershed of the Tug Fork of the Big Sandy River west of Williamson on the Norfolk & Western R. R.....	.....do.....	2.20	2.45	1.95
The following producers are not included:				
Blue Gem Coal produced in Knox and Whitley Counties by operators who are members of the Tri-County Blue Gem Coal Operators' Association.....	.....do.....	3.45	3.70	2.30
Coal produced in Whitley County by the Wallen-Jellico Coal Co.....	.....do.....	3.25	3.50	2.50
Coal produced in Pike County by the Elkhorn City Coal Co. and the Guthrie Coal Co.....	.....do.....	2.55	2.80	2.30
Kentucky Block Cannel Coal Co. south of the Licking River in Morgan County.....	Sept. 25, 1918	3.45	3.50	2.30
Norton Coal Co., White Plains Coal Co., and B. D. Williams Coal Co. in the Empire or Mannington seam, in Christian and Hopkins Counties.....	.....do.....	2.35	2.60	2.00
Maryland:				
The North Maryland Coal Mining Co. in Allegany County.....	Dec. 3, 1917	2.75		
The upper Potomac, Cumberland, and Piedmont fields, comprising all coal mined in the State of Maryland and in parts of West Virginia.....	Feb. 1, 1918	2.40	2.65	2.15
Michigan:				
What Cheer Mining Co., Banner Coal Co., Bliss Coal Co., Robert Gage Coal Co., Beaver Coal Co., Consolidated & Wolverine Coal Cos.....	Oct. 27, 1917	3.15	3.60	2.20
	Nov. 30, 1917	3.40	3.95	2.25

¹ Announced Jan. 2, 1918.

MODIFICATIONS TO THE PRESIDENT'S PRICES MADE BY THE UNITED STATES FUEL ADMINISTRATOR—Continued.

District.	Date when effective.	Run of mine.	Prepared sizes.	Slack or screenings.
Michigan—Continued.				
Handy Bros.....	Nov. 30, 1919	\$3. 70	\$4. 25	\$2. 55
Caledonia mine, operated by the Robert Gage Coal Co.....	.....do.....	4. 55	5. 05	3. 55
Flint mine, operated by the What Cheer Mining Co.....	.....do.....		5. 55	3. 55
What Cheer Mining Co., Banner Coal Co., Bliss Coal Co., Robert Gage Coal Co., Beaver Coal Co., Consolidated & Wolverine Coal Co.....	Aug. 16, 1918	3. 30	3. 85	2. 50
Handy Bros.....	.....do.....	3. 60	4. 15	2. 80
Caledonia mine, operated by Robert Gage Coal Co.....	.....do.....	4. 45	4. 95	3. 80
Flint mine, operated by What Cheer Mining Co.....	.....do.....	3. 05	5. 45	3. 80
Missouri:				
Lafayette, Ray, Clay, Platte, and Linn Counties.....	Oct. 1, 1917	3. 15	3. 40	2. 90
Putnam County and the Longwall thin vein seam in Randolph County.....	Oct. 27, 1917	3. 15	3. 40	2. 90
District No. 1: Audrain, Barton, Bates, Galloway, Henry, Johnson, Monroe, Randolph, Ralls, St. Clair, Schuyler, Vernon, and Montgomery Counties; Adair County except operations of the Star Coal Co., and Macon County east of New Cambria, and mining operations not covered by other rulings.....	Apr. 20, 1918	2. 70	2. 95	2. 45
District No. 2: Boone, Clay, Cooper, Charlton, Carroll, Dade, Harrison, Linn, Lafayette, Putnam, Ray, and Sullivan Counties, and Macon County west of New Cambria, and the long wall thin-seam mines in Randolph County.....	.....do.....	3. 15	3. 40	2. 45
Grundy County, operations of the Star Coal Co. in Adair County and shaft workings in the Lightning Creek or upper thin vein in Barton, Bates, and Vernon Counties.....	.....do.....	3. 65	3. 95	2. 45
Platte County.....	.....do.....	3. 40	3. 65	2. 45
Barton and Vernon Counties.....	Aug. 3, 1918			
Nut run or stoker coal.....		\$3. 05		
Mill coal.....		2. 95		
Moniteau and Morgan Counties.....	Sept. 14, 1918	4. 50	5. 00	2. 45
Montana.....	Oct. 27, 1917	2. 70	3. 60	1. 50
Do.....	Mar. 11, 1918	2. 65	3. 30	1. 50
Do.....	May 1, 1918	2. 70	3. 60	1. 00
New Mexico:				
Raton district.....	Oct. 28, 1917	2. 75	3. 25	2. 00
Gallup field.....	Nov. 28, 1917	3. 05	4. 50	2. 00
Cerrillos and Carthage fields.....	.....do.....	4. 05	5. 05	3. 55
Sugarite and Monero fields.....	.....do.....	3. 00	4. 00	2. 00
Raton district.....	Apr. 1, 1918	2. 35	3. 25	1. 65
Gallup field.....	.....do.....	3. 05	4. 05	2. 00
Carthage field.....	.....do.....	4. 25	5. 05	3. 55
Cerrillos field.....	.....do.....	4. 05	4. 55	3. 55
Sugarite and Monero fields.....	.....do.....	3. 00	4. 00	2. 00
Cerrillos field.....	Aug. 30, 1918	4. 05	5. 05	3. 55
North Dakota:				
Lignite coal.....	Jan. 4, 1918	2. 25		1. 25
Screened lump.....		\$2. 50		
6-inch steam lump.....		2. 00		
Lignite coal, mined south of the twelfth standard parallel.....	May 24, 1918	2. 25	\$2. 50	1. 25
6-inch steam lump.....	.....do.....	\$2. 50		
All coal mined north of the twelfth standard parallel.....	.....do.....	2. 70	3. 00	1. 00
6-inch steam lump.....		\$2. 50		
Ohio:				
Deerfield or Palmyra field, Massillon field, and Jackson field.....	Nov. 6, 1917	3. 75	4. 00	3. 50
Do.....	Jan. 23, 1918	3. 25	3. 50	3. 00
Jefferson, Harrison, Belmont, Carroll, and Monroe Counties.....	Mar. 23, 1918	2. 00	2. 25	1. 75
District No. 1: Meigs County, Cheshire and Addison Townships in Gallia County.....	June 29, 1918	2. 35	2. 60	2. 10
District No. 2: Vinton, Jackson, Lawrence, Sciota, Pike, and Gallia Counties, except Cheshire and Addison Townships in Gallia County.....	.....do.....	3. 00	3. 25	2. 55
District No. 3: Hocking and Athens Counties, and Coal Township and the south half of Monroe Township Perry County.....	.....do.....	2. 10	2. 35	1. 85
The Bailey Run or No. 7 seam.....	.....do.....	2. 50	2. 75	2. 25
District No. 4: Noble and Washington Counties, Morgan County, except the township of Homer, and Perry County, except the townships of Coal and Monroe.....	.....do.....	2. 50	2. 75	2. 25
District No. 5: Guernsey and Muskingum Counties.....	.....do.....	2. 25	2. 50	2. 00
District No. 6: Holmes, Tuscarawas, Carroll, Coshoc-ton Counties and the townships of Monroe, Franklin, Washington, and Freeport in Harrison County and the townships of Washington and Yellow Creek in Columbiana County, and the townships of Brush Creek, Saline, Springfield, Ross, and Knox in Jefferson County.....	.....do.....	2. 50	2. 75	2. 25

MODIFICATIONS TO THE PRESIDENT'S PRICES MADE BY THE UNITED STATES FUEL ADMINISTRATOR—Continued.

District.	Date when effective.	Run of mine.	Prepared sizes.	Slack or screenings.
Ohio—Continued.				
District No. 7: Trumbull, Portage, Summit, Mahoning, Medina, Wayne, Stark, and Columbiana Counties, except the townships of Yellow Creek and Washington.....	June 29, 1918	\$3.00	\$3.25	\$2.85
District No. 8: Monroe County, Belmont County, except Warren Township; Harrison County, except Monroe, Franklin, Washington, and Freeport Townships; Jefferson County, except Brush Creek, Saline, Ross, Knox, and Springfield Townships.....	.....do.....	1.90	2.15	1.90
Wayne Mining Co., Guernsey County.....	Aug. 20, 1918	2.50	2.75	2.25
District No. 1.....	Aug. 23, 1918	2.30	2.55	2.05
District No. 2.....	.....do.....	2.95	3.20	2.80
District No. 3: Hocking and Adams Counties, Coal and Monroe Townships in Perry County, and Homer Township in Morgan County.....	.....do.....	2.05	2.30	1.80
The Bailey Run or No. 7 seam.....	.....do.....	2.45	2.70	2.20
District No. 4: Washington and Noble Counties, Morgan County except Homer Township, and Perry County except Coal and Monroe Townships.....	.....do.....	2.45	2.70	2.20
District No. 5: Muskingum County.....	.....do.....	2.20	2.45	1.95
District No. 6: Holmes, Tuscarawas, Carroll, and Coshocton Counties, Monroe, Franklin, Washington, and Freeport in Harrison County, and Washington and Yellow Creek Townships in Columbiana County, and Brush Creek, Saline, Springfield, Ross, and Knox Townships in Jefferson County, and operations in the 8-A vein in Flushing and Union Townships in Belmont County.....	.....do.....	2.45	2.70	2.20
District No. 7.....	.....do.....	2.95	3.20	2.80
District No. 8: Monroe County and Belmont County, except Warren Township and operations in the 8-A vein in Flushing and Union Townships, Harrison County except Monroe, Franklin, Washington, and Freeport Townships, and Jefferson County except Brush Creek, Saline, Ross, Knox, and Springfield Townships.....	.....do.....	1.90	2.15	1.90
District No. 9: Guernsey County and Warren Township in Belmont County.....	.....do.....	2.05	2.30	1.80
Wayne Mining Co., Guernsey County.....	.....do.....	2.50	2.75	2.25
Southern Ohio Coal Co., Starr Township, Hocking County.....	Oct. 8, 1918	2.95	3.20	2.80
Wheeling and Liberty Townships in Guernsey County (transferred from district No. 9 and district No. 6).....	Nov. 19, 1918	2.20	2.45	1.95
Oklahoma:				
Le Flore and Haskell Counties.....	Oct. 1, 1917	3.50	4.30	2.25
Ocmulgee and Tulsa Counties.....	.....do.....	3.10	3.90	2.00
Coal County.....	.....do.....	3.30	4.10	2.00
Pittsburg and Latimer Counties.....	.....do.....	3.50	4.30	2.25
Le Flore and Haskell Counties (conditional).....	Nov. 30, 1917	3.75	4.55	2.50
Ocmulgee and Tulsa Counties (conditional).....	.....do.....	3.35	4.15	2.25
Coal County (conditional).....	.....do.....	3.55	4.35	2.25
Pittsburg and Latimer Counties (conditional).....	.....do.....	3.75	4.55	2.50
Le Flore, Haskell, Ocmulgee, Tulsa, Rogers, and Coal Counties, and the Hartshorn-Wilburton vein in Pittsburg and Latimer Counties.....	Mar. 29, 1918	3.70	4.60	2.40
McAlester vein in Pittsburg and Latimer Counties.....	.....do.....	4.25	5.10	3.00
Pennsylvania:				
O'Donnell Bros., at Morris Run, Tioga County (conditional).....	Dec. 8, 1917	2.25	2.50	2.00
Ajax Hocking Coal Co., in Clearfield and Somerset Counties (publication No. 2 and special order).....	Nov. 13, 1917	2.75	.....	.....
Operations in the counties of Tioga, Lycoming, Clinton, Center, Huntingdon, Bedford, Cameron, Elk, Clearfield, Cambria, Blair, Somerset, Jefferson, Indiana, Clarion, Armstrong, Butler, Mercer, Lawrence, and Beaver, and operations in Allegheny County from the lower end of Tarentum Borough north to the county line, and in Westmoreland County from a point opposite the lower end of Tarentum Borough north along the Allegheny River to the Kiskiminitas River, and along the Kiskiminitas River eastward to the Conemaugh River, and continuing along the Conemaugh River to the county line of Cambria County.....	Feb. 16, 1918	2.60	2.60	2.60
Operations on the Baltimore & Ohio R. R. from the Somerset County line to and including Indian Creek and the Indian Creek Valley branch of the Baltimore & Ohio R. R.	Mar. 14, 1918	2.60	2.60	2.60

MODIFICATIONS TO THE PRESIDENT'S PRICES MADE BY THE UNITED STATES FUEL ADMINISTRATOR—Continued.

District.	Date when effective.	Run of mine.	Prepared sizes.	Slack or screenings.
Pennsylvania—Continued.				
Pittsburgh field, including the counties of Washington, Greene, Fayette, Westmoreland, and Allegheny, except (1) that portion of Allegheny County from the lower end of Tarentum Borough north to the county line; (2) the territory in Westmoreland County from a point opposite the lower end of Tarentum Borough north along the Allegheny River to the Kiskiminitas River and along the Kiskiminitas River eastward to the Conemaugh River and continuing along the Conemaugh River to the county line of Cambria County; (3) operations on Indian Creek in Westmoreland County; and (4) operations in the Ohio Pyle district of Fayette County.....	Mar. 23, 1918	\$2.00	\$2.25	\$1.75
Coal mined by the Fall Brook Coal Co. in Tioga County.....	June 14, 1918	2.50	2.80	2.30
The counties of Allegheny, Westmoreland, Fayette, Greene, and Washington, except (1) that portion of Allegheny County from the lower end of Tarentum Borough north to the county line; (2) the territory in Westmoreland County from a point opposite the lower end of Tarentum Borough north along the Allegheny River to the Kiskiminitas River and along the Kiskiminitas River eastward to the Conemaugh River and continuing along the Conemaugh River to the county line of Cambria County; (3) operations on Indian Creek in Westmoreland County; and (4) operations in the Ohio Pyle district of Fayette County.....	June 29, 1918	1.90	2.15	1.90
Coal produced at the stripping operation of the Graff Mining Co. in Westmoreland County (wage increase not to be added).....	Oct. 1, 1918	2.95	2.95	2.95
Wilson Begler Coal Co., Beaver County.....	Nov. 19, 1918	2.95	3.20	2.80
Tennessee (eastern):				
Counties of Scott, Claiborne, Anderson, Morgan, and Campbell.....	Oct. 11, 1917	2.40	2.65	2.15
Blue Gem district, Campbell County.....	Nov. 4, 1917	3.55	3.80	2.30
Counties of Claiborne, Morgan, Anderson, Scott, and Campbell, other than the Blue Gem (conditional)....	Dec. 3, 1917	2.65	2.90	2.40
Bledsoe, Marion, Grundy, and White Counties.....	Dec. 8, 1917	2.40	2.65	2.15
Cumberland County.....	Jan. 12, 1918	2.40	2.65	2.15
All except Overton and Fentress Counties.....	Apr. 5, 1918	2.65	2.90	2.40
Overton and Fentress Counties.....	do.....	2.20	2.45	1.95
Blue Gem coal produced in Campbell County by operators who are members of the Tri-County Blue Gem Coal Operators' Association.....	May 1, 1918	3.55	3.80	2.40
Bon Air Coal & Iron Corporation in the Bon Air mine, in White County.....	June 19, 1918	3.45	3.70	2.30
T. M. Morrison Coal Corporation and the Lone Mountain Coal Corporation at Pennington Gap in Lee County.....	do.....	2.55	2.80	2.30
White Oak Coal Co., Fentress County.....	Sept. 14, 1918	2.55	2.80	2.30
Sterling Coal & Coke Co., Reliance Coal & Coke Co., Brysan Mountain Coal & Coke Co., Climax Coal Co., Mingo Coal & Coke Co., and Fork Ridge Coal & Coke Co., in Claiborne County.....	Oct. 28, 1918	2.60	2.85	2.30
Coal mined in Campbell County by members of the Tri-County Blue Gem Operators' Association.....	Oct. 29, 1918	2.55	3.70	2.30
Nut and slack through 1½-inch bars.....\$2.55	Dec. 7, 1918	3.30	4.05	2.30
Texas:				
Operators at Thurber and Strawn.....	Nov. 14, 1917	3.60	4.40	2.25
Operators at Bridgeport.....	do.....	4.25	5.05	2.25
Counties of Young, Erath, and Palo Pinto.....	Nov. 16, 1917	3.60	4.40	2.25
Wise County.....	do.....	4.25	5.05	2.25
Lignite coal.....	Mar. 5, 1918	1.40		.85
Screened, at least 15 per cent screenings out, \$1.50.				
Lignite coal.....	June 22, 1918	1.55	1.75	1.00
All Texas bituminous coal, except counties of Erath, Palo Alto, and Young.....	do.....	4.25	5.05	2.25
Counties of Erath, Palo Pinto, and Young.....	do.....	3.40	4.20	2.25
Do.....	Aug. 16, 1918	3.40	4.55	2.25
Wise County.....	Sept. 4, 1918	4.25	5.40	2.25
Utah.....				
Virginia:				
Mines operated near St. Charles, Lee County, by the Darby Coal Mining Co., Black Mountain Mining Co., Virginia Lee Co., Old Virginia Coal Co., United Collieries Co. (Inc.), Benedict Coal Corporation, and the Imperial mine of the Virginia Iron, Coal & Coke Co., Roanoke.....	Oct. 11, 1917	2.40	2.65	2.15
	Apr. 20, 1918	2.65	2.90	2.40

¹ Announced Jan. 2, 1918.

MODIFICATIONS TO THE PRESIDENT'S PRICES MADE BY THE UNITED STATES FUEL ADMINISTRATOR—Continued.

District.	Date when effective.	Run of mine.	Prepared sizes.	Slack or screenings.
Virginia—Continued.				
Imperial mine of the Virginia Iron, Coal & Coke Co., of Roanoke.....	Oct. 27, 1917	\$2.40	\$2.65	\$2.15
Richmond Basin, Chesterfield and Henrico Counties...	Jan. 21, 1918	3.30	3.55	3.05
Extreme northern part of Buchanan County.....	Feb. 7, 1918	2.40	2.65	2.15
Clinch Valley No. 1 district or "Upper Clinch"; coal mining operations on the Norfolk & Western Ry., Hockman to Finney, inclusive.....	Feb. 28, 1918	2.50	2.75	2.25
Lee, Wise, Dickinson Counties, and Russell County west of Finney, on the Norfolk & Western Ry.....	Apr. 5, 1918	2.20	2.45	1.95
Pocahontas district: Operations on the Norfolk & Western Ry. and branches west of Graham, Va., to Welch, W. Va., including Newhall, Berwind, Canebrake, Hartwell, and Beech Fork branches; operations on the Virginian Railroad and branches, west of Rock to Herndon, W. Va. (confirmation of President's prices).....	Mar. 21, 1918	2.00	2.25	1.75
Darby Coal Mining Co., Virginia Lee Co., Old Virginia Coal Co., United Collieries Co. (Inc.), Benedict Coal Corporation, Imperial mine of the Virginia Iron, Coal & Coke Co., Roanoke.....	Apr. 26, 1918	2.65	2.90	2.40
Mines operated near St. Charles, Lee County, by the Cumberland Coal Co., the Penn Lee Coal Co., the Lecova Coal Co., and the Wilma Coal Co.....	May 24, 1918	2.65	2.90	2.40
Pocahontas district (as described in the order of the United States Fuel Administrator, dated Mar. 21, 1918).....	June 1, 1918	(¹)	.....	.....
Lee County: Mohawk Coal Mining Co., Keokee; Powell River Coal Co., Purcell; North Fork Coal Co., Pennington Gap.....	Aug. 20, 1918	2.55	2.80	2.30
Splash Dam Coal Corporation, and McClure Coal Corporation, in Dickinson County.....	Aug. 19, 1918	2.40	2.65	2.15
T. M. Morrison Coal Corporation, Lone Mountain Coal Corporation, at Pennington Gap in Lee County.....	.....do.....	2.55	2.80	2.30
Black Mountain Mining Co., Benedict Coal Co., Bondurant Coal Co., Darby Coal Co., United Collieries Co., and Old Virginia Coal Co., in Lee County.....	Oct. 28, 1918	2.60	2.85	2.30
Clinchfield Coal Corporation, Camper Coal Co., Kilgore Coal Co., Stonegap Colliery Co., J. A. Esser Coke Co., Yellow Creek Coal & Coke Co., Gladeville Coal Co., Wise Coal & Coke Co., Norton Coal Co., Blackwood Coal & Coke Co., and Stonega Coal Co., in Wise County, and Stonega Coal Co., at Keokee mine in Lee County.....	.....do.....	2.15	2.40	1.85
Roberts Coal Co., in Wise County.....	.....do.....	2.60	2.85	2.30
Robert Fleming & Co., of Norton; Hawthorne Co., of Norton; John B. Guernsey & Co., of Tacoma.....	Nov. 19, 1918	2.15	2.40	1.85
Emerald Coal Co., Obey Branch Coal Co., Pucketts Creek Coal Co., in Lee County.....	Dec. 7, 1918	2.55	2.80	2.30
Bradley Coal Co., White Oak Coal Co., Hawthorne Coal Co., Felton Coal Mining Co., in Wise County.....	.....do.....	2.55	2.80	2.30
Stone Gap Colliery Co., Norton Coal Co., J. A. Esser Coal Co., Kilgore Coal Co., in Wise County.....	.....do.....	2.40	2.85	2.30
District No. 1: Operations not classified under other districts or covered by the proviso hereinafter set forth.....	Dec. 16, 1918	1.90	2.15	1.65
District No. 2: Operations in the Richmond Basin within Chesterfield and Henrico Counties.....	.....do.....	3.20	3.45	2.95
District No. 3: Clinch Valley No. 1 district or "Upper Clinch," being coal-mining operations on the Norfolk & Western Ry. from Hockman to Finney, inclusive.....	.....do.....	2.40	2.65	2.15
District No. 4: That portion of the Pocahontas district located in the State of Virginia, said Pocahontas district being more particularly described as comprising operations on the Norfolk & Western Ry. west of Graham, Va., to Welch, W. Va., also including operations on the Virginian Ry. and branches west of Rock to Herndon, W. Va.....	.....do.....	1.90	2.15	1.65
District No. 5: Lee, Wise, and Dickinson Counties and Russell County west of Finney on the Norfolk & Western Ry.....	.....do.....	2.10	2.35	1.85
District No. 6: That portion of the Thacker district located in Virginia, being operations in the extreme northern portion of Buchanan County.....	.....do.....	2.20	2.45	1.95
Providing that the following prices shall apply to the operations and operators hereinafter mentioned:				

¹ Where slack or screenings passing through the accepted standard screens customarily used prior to Jan. 1, 1916, constituted not less than 55 per cent of the mine-run output of any mine, such slack or screenings may be sold at the run-of-mine price applicable at said mine at date of shipment.

MODIFICATIONS TO THE PRESIDENT'S PRICES MADE BY THE UNITED STATES FUEL ADMINISTRATOR—Continued.

District.	Date when effective.	Run of mine.	Prepared sizes.	Slack or screenings.
Virginia—Continued.				
Operations of Splash Dam Coal Corporation and McClure Coal Corporation in Dickenson County.....	Dec. 16, 1918	\$2.40	\$2.65	\$2.15
Operations of Cumberland Coal Co., Penn Lee Coal Co., Leecova Coal Co., Wilma Coal Co., Virginia Lee Co., Emerald Coal Co., Obey Branch Coal Co., Pucketts Creek Coal Co., Mohawk Coal Mining Co., Powell River Coal Co., North Fork Coal Co., T. M. Morrison Coal Corporation, Lone Mountain Coal Corporation, and Imperial mine of the Virginia Iron, Coal & Coke Co., of Roanoke, in Lee County.....	do.....	2.55	2.80	2.30
Operations of Black Mountain Mining Co., Benedict Coal Co., Bondurant Coal Co., Darby Coal Co., United Collieries Co. (Inc.), and Old Virginia Coal Co., near St. Charles, Lee County.....	do.....	2.60	2.85	2.30
Operations of Stonega Coal & Coke Co. at Kooke, Lee County; Clinchfield Coal Corporation, Camper Coal Co., Yellow Creek Coal & Coke Co., Blackwood Coal & Coke Co., Stonega Coal & Coke Co., Robert Fleming & Co., and John B. Guernsey & Co., in Wise County.....	do.....	2.15	2.40	1.85
Operations of Bradley Coal Co., White Oak Coal Co., and Felton Coal Mining Co., in Wise County.....	do.....	2.55	2.80	2.30
Operations of Roberts Coal Co., Stone Gap Colliery Co., Norton Coal Co., Hawthorne Coal Co., J. A. Esser Coke Co., and Kilgore Coal Co., in Wise County.....	do.....	2.60	2.85	2.30
Washington: ¹				
Pierce and King Counties.....	Oct. 1, 1917	3.25	4.50	3.00
Screened coals—				
Bituminous—				
Kittitas County.....	Mar. 29, 1918	3.55	3.95	2.50
Lump and egg.....			3.25	
Special steam and gas.....				
Semibituminous—				
Lewis and Thurston Counties.....	Mar. 29, 1918	2.75	3.95	1.25
Lump.....			3.25	
Lump nut.....			3.00	
Nut.....				
Washed coals—				
Bituminous—				
Kittitas County.....	Mar. 29, 1918		4.00	
Pierce, King, Lewis, and Skagit Counties.....	do.....		6.00	2.50
Lump nut.....			5.25	
Mixed steam.....			4.80	
Straight steam and gas.....				
Sub-bituminous—				
King County.....	Mar. 29, 1918		5.00	1.50
Lump nut.....			3.50	
Pea.....			3.25	
Buckwheat.....				
Lewis County.....	Mar. 29, 1918		3.95	1.25
Lump.....			3.75	
Nut.....	Mar. 29, 1918		3.00	
Pea.....			1.50	
Buckwheat.....				
West Virginia:				
Ajax Hocking Coal Co., in Mineral County (Publications 2, 4E, and special order).....	Nov. 13, 1917	2.75		
Davy-Pocahontas Coal Co., in McDowell County.....	Nov. 22, 1917	2.75		
Pomeroy field.....	Nov. 28, 1917	2.35	2.60	2.10
Mineral, Grant, Tucker Counties and the extreme eastern and southeastern portion of Preston County.....	Feb. 1, 1918	2.40	2.65	2.15
Kenova and Thacker fields in Mingo County, the extreme southern part of Wayne County, and the extreme northwestern part of McDowell County.....	Feb. 7, 1918	2.40	2.65	2.15
Tug River district: Coal-mining operations on the Norfolk & Western Ry., west of Welch to Panther, including branches, except Newhall, Berwind, Canebrake, and Hartwell.....	Feb. 28, 1918	2.40	2.65	2.15
Preston County, being part of the upper Potomac, Cumberland, and Piedmont fields.....	do.....	2.40	2.65	2.15
Wayne County, being part of the Kenova and Thacker fields.....	Mar. 5, 1918	2.40	2.65	2.15
Pocahontas district: Operations on the Norfolk & Western Ry., and branches west of Graham, Va., to Welch, W. Va., including Newhall, Berwind, Canebrake, Hartwell, and Beech Fork branches; also operations on the Virginian Railroad and branches, west of Rock to Herndon, W. Va. (President's prices).....	Mar. 21, 1918	2.00	2.25	1.75

¹ Preparations of coal mined in the State of Washington must conform to reports submitted to and approved by the State mine price board.

MODIFICATIONS TO THE PRESIDENT'S PRICES MADE BY THE UNITED STATES FUEL ADMINISTRATOR—Continued.

District.	Date when effective.	Run of mine.	Prepared sizes.	Slack or screenings.
West Virginia—Continued.				
No. 8 or Pittsburgh seam, in Hancock, Brook, Ohio and Marshall Counties.....	Mar. 23, 1918	\$2.00	\$2.25	\$1.75
No. 10 district; Coal and coke and Gauley Districts; Taylor, Barbour, Lewis, Buckhannon, Randolph, Gilmer, Braxton, Webster, and Greenbrier Counties; operations in Nicholas County east of the mouth of the Meadow Branch of the Gauley River, and the coal and coke district in Kanawha and Clay Counties north of Charleston.....	Apr. 20, 1918	2.30	2.55	2.05
Fairmont district; Monongalia, Marion, and Harrison Counties.....	.....do.....	2.15	2.40	1.90
Thacker District: Operations in McDowell County, west of Panther on the Norfolk & Western Ry. and in Mingo County west along the Tug Fork of the Big Sandy River to Williamson on the Norfolk & Western Ry.....	.....do.....	2.30	2.55	2.05
New River district: Fayette County south of Hawk's Nest on the Chesapeake & Ohio R. R., and Fayette and Raleigh Counties south of Paintsville on the Virginian R. R., and Wyoming County north of Herndon on the Virginian R. R.....	.....do.....	2.35	2.60	2.10
Logan district: Logan County and operations in Boone County south of Danville on the Chesapeake & Ohio R. R., and Lincoln County south of Gill on the Chesapeake & Ohio R. R.....	.....do.....	2.15	2.40	1.90
Putnam County.....	.....do.....	2.50	2.75	2.25
Kenova District: Operations on the watershed of the Tug Fork of the Big Sandy River west of Williamson on the Norfolk & Western Ry. and Wayne County.....	.....do.....	2.30	2.55	2.05
Kanawha district: Nicholas County west of the mouth of the Meadow Branch of the Gauley River; Fayette County west of Hawk's Nest on the Chesapeake & Ohio R. R., and north of Paintsville on the Virginian R. R., and operations in Raleigh and Boone Counties on the watershed of the Clear Fork Branch of Coal River, Boone County, north of Danville on the Chesapeake & Ohio R. R.; Kanawha County south of Charleston and Lincoln County north of Gill on the Chesapeake & Ohio R. R.....	.....do.....	2.25	2.50	2.00
Mines operated near Richmond, Nicholas County by the Saxman Coal & Coke Co.....	May 24, 1918	2.80	3.05	2.55
Pocahontas district: New River district, Tug River district (as described in the order of the United States Fuel Administrator, Mar. 21, 1918).....	June 1, 1918	(¹)	.....	.....
Mason County.....	June 29, 1918	2.35	2.60	2.10
Do.....	Aug. 29, 1918	2.30	2.55	2.05
Hancock, Brook, Ohio, and Marshall Counties.....	June 29, 1918	1.90	2.15	1.90
Three Forks Coal Co., in the New River district.....	Dec. 7, 1918	2.55	2.55	2.00
Wyoming.....	Oct. 1, 1917	2.50	3.50	1.25
Do.....	Mar. 11, 1918	2.65	3.30	1.50
Sub-bituminous—				
Egg run.....	Mar. 23, 1918	.....	2.15	.....
Nut run.....	.....do.....	.....	2.00	.....

¹ Where slack or screenings passing through the accepted standard screens customarily used prior to Jan. 1, 1916, constituted not less than 55 per cent of the mine run output of any mine, such slack or screenings may be sold at the run-of-mine price applicable at said mine at date of shipment.

REVISION OF DESCRIPTION OF CERTAIN DISTRICTS IN WEST VIRGINIA AS CONTAINED IN PRICE ORDER OF APRIL 19, 1918, ANNOUNCED JUNE 27, 1918.

New River district: County of Fayette east of the Ganley River to Hawks Nest on the Chesapeake & Ohio Railroad, and east of a line drawn from Hawks Nest to Roseville on the Virginian Railroad, and the counties of Fayette and Raleigh, south of Roseville, and the county of Wyoming north of Herndon on the Virginian Railroad.

Kanawha district: County of Nicholas west of the mouth of the Meadow Branch of the Ganley River, the county of Fayette west of the Ganley River and north of the Kanawha and west of a line drawn from Hawks Nest on the Chesapeake & Ohio Railroad to Roseville on the Virginian Railroad and operations in the counties of Raleigh and Boone on the watershed of the Clear Fork Branch of Coal River, and the county of Boone north of Danville on the Chesapeake & Ohio Railroad, and the counties of Kanawha and Clay south of Charleston and the county of Lincoln north of Gill on the Chesapeake & Ohio Railroad.

District.	Lump.	Run of pile.	Screenings.
Coal at docks on Lake Michigan or Lake Superior:			
From Oct. 30, 1917, to Apr. 30, 1918—			
Youghlogheny, Fairmont, Greensburg, and Westmoreland County fields.....	\$6.60	\$6.40	\$6.20
No. 8 seam, eastern Ohio fields.....	6.40	6.20	6.10
Hocking and Pomeroy, Ohio, fields.....	6.60	6.40	6.20
West Virginia splint and block fields.....	6.85	6.65	6.55
Kentucky gas and steam and splint and block fields.....	7.20	7.00	6.55
Smokeless coal fields.....	7.70	6.55	6.55
From June 1, 1918, to Apr. 30, 1919—			
Youghlogheny, Fairmont, Greensburg, Westmoreland No. 8 seam, Ohio and Hocking, and Pomeroy fields.....	5.80	5.55	5.30
Harlan, Thacker, Kenova, and Kanawha fields.....	6.30	6.05	5.80
Pocahontas, New River, and Tug River fields.....	6.30	6.05	6.05
From Sept. 26, 1918, to Apr. 30, 1919—			
Southwestern district in Pennsylvania, Fairmont and Panhandle districts in West Virginia, and districts 3, 8, and 9 in Ohio.....	5.80	5.55	5.30
Harlan, Thacker, and Kenova districts in Kentucky; Thacker, Kenova, Kanawha, Mason County districts in West Virginia; districts Nos. 1, 2, 4, 5, 6, and 7 in Ohio.....	6.30	6.05	5.80
Pocahontas, New River, and Tug districts in West Virginia.....	6.30	6.05	6.05

¹ Lump and egg.

Above prices are based on freight rates between mines and Lake Erie ports, effective June 1, 1918. By order of November 20, 1918, the sum of \$1.05 per gross ton was added to these prices.

Cannel coal.—On June 28, 1918, prices of cannel coal were fixed as for those of bituminous coal at the mine where the coal was produced, except that if the producer held a permit he might sell lump cannel coal at not to exceed \$1 per net ton over the price for run-of-mine bituminous at the mine where such coal was produced.

Mixture of cannel and bituminous coal.—On February 26, 1918, the following ruling was announced: "Where cannel and bituminous coals are mixed the maximum price for the mixture shall be the mine price for the bituminous coal in such mixture."

On July 16, 1918, regulations became effective as follows:

SECTION 1. The prices of cannel coal shipped on and after the effective date of this regulation are hereby fixed f. o. b. cars at the mine per net ton at not to exceed the applicable Government mine price for bituminous coal at the mine where such cannel coal is produced: *Provided, however,* That if the producer of such cannel coal shall obtain from the United States Fuel Administrator a permit therefor lump cannel coal may be sold for a sum not to exceed \$1 per net ton above the applicable Government mine price for run-of-mine bituminous coal at the mine where such coal is produced.

SEC. 3. When cannel coal is loaded into box cars a charge of 50 cents per net ton in addition to the prices fixed in section 1 hereof may be made to cover the cost of labor and material necessary to load such coal into box cars. No such charge shall be made on shipments in box cars of cannel coal mixed with bituminous coal.

SEC. 4. When run-of-mine or prepared cannel coal is mixed with bituminous coal of any size the mixture shall be sold at a price not to exceed the Government mine price for bituminous screenings applicable at date of shipment at the mine where such cannel coal is produced.

SEC. 5. When cannel coal from which the lumps have been screened is mixed with bituminous coal of any size the mixture shall be sold at a price not to exceed the Government mine price for bituminous screenings applicable at date of shipment at the mine where such cannel coal is produced less 30 cents per net ton.

Modified mine-run coal.—By order of July 3, 1918, effective July 5, 1918, maximum prices of "modified mine-run" coal were to be the Government prices for screenings at the mine where such coal was produced, plus the following percentages of the margin or difference between the applicable Government mine prices for mine run and screenings at such mines, viz:

Run of mine passed through 2-inch openings, 40 per cent of such margin.
Run of mine passed through 3-inch openings, 75 per cent of such margin.

Run of mine passed through 4-inch openings, 90 per cent of such margin.

Run of mine passed through 5-inch openings, 95 per cent of such margin.

Run of mine passed through 6-inch or larger openings shall take the applicable Government price for the run of mine.

Sized screenings.—An order fixing the prices of sized screenings, effective August 1, 1918, was as follows:

1. Special sizes—passing over a mesh one-half inch in size and over the applicable Government mine price for prepared coal at the mine where such screenings were produced.

2. Special sizes—passing over a mesh over one-fourth inch and under one-half inch in size, the applicable Government mine price for run-of-mine coal at the mine where such special sizes were produced.

3. Fine sizes—from sized coal passing through mesh one-half inch or smaller in size, the applicable Government mine price for standard screenings at the mine where such fine screenings are produced less 30 cents per net ton.

4. If fine screenings or "carbon" passing through one-half inch or smaller mesh as the result of producing special-sized screenings are mixed with other coal whether the same be mine run, prepared, or standard screenings, the selling price of the mixture shall not exceed the applicable Government mine price for standard screenings at the mine where such mixture is produced less 30 cents per net ton.

Smithing coal.—Until February 15, 1918, smithing coal sold at the prevailing market prices. After that date it sold at the going Government price for prepared sizes of bituminous coal applicable to the mine producing such coal.

On April 25, 1918, provisions were made for extra charges for special preparation, packing in bags, or loading into box cars.

By order effective June 19, 1918, crushed run-of-mine smithing coal produced by the Sequatchie Coal Co. at its New Etna mines in Marion County, Tenn., was to be sold at \$3.80 per net ton f. o. b. cars at such mines plus 50 cents per net ton if loaded in box cars and plus the actual cost of bagging, as provided in the order of April 25, 1918.

Export and bunker coal.—Until December 13, 1917, the prices of coal as fixed by the President and modified by the Fuel Administrator, applied to export and bunker coal.

Under order of December 13, 1917, the maximum price of such coal was named as the price at the mine at the time such coal left the mine plus transportation charges from the mine to port of lading plus \$1.35 per ton of 2,000 pounds. To this price, so computed, the seller of the coal or such other agency as performed the actual work of bunkering or loading the vessel, could add the customary charges for storage, special unloading and other port charges.

On February 25, 1918, certain revisions were made in the previous order as follows:

1. No coal can be invoiced at the excess price provided in this order, except by the operator or dealer who actually loads it into foreign vessels, and only after the coal has been so loaded.

2. After, and only after, such excess price has been collected in accordance with paragraph 1, all or such part of it as has been agreed upon beforehand may be paid to the dealer or dealers from or through whom the coal was obtained.

3. In setting the price of coal for foreign bunkering or export purposes, no jobber's margin or other commission in addition to the \$1.35 per ton provided in the order shall be added to the price of the coal.

4. The phrase "deliver to vessels for foreign bunkering purposes," mentioned above, is hereby held to mean coal put in the bunkers of any vessel sailing from a tidewater port for any port outside the United States and Alaska, excepting naval vessels or Army transports.

5. Coal shipped to possessions or dependencies of the United States, when consigned to any department of the United States Government, shall not take the excess price provided by this order.

Coal from wagon mines.—Under date of October 6, 1917, regulations were issued for prices of coal delivered direct to the consumer from the mine by wagon or truck:

Coal delivered direct to the consumer from the mine by wagon or truck (whether from wagon mines or other mines) shall be sold at not more than the prices fixed by the President and the Fuel Administrator plus the actual cost of hauling.

Coal bought by a railroad for its own use as fuel from a wagon-mine hauling to such railroad shall be sold at not more than the prices fixed by the President and the Fuel Administrator plus the actual cost of hauling.

No charge for hauling may be made by an operator of a wagon mine or paid by the purchaser of the coal on coal shipped by rail, except where such shipment is made in box cars, in which case an additional charge not to exceed 75 cents per ton may be made. In all other cases the price of wagon-mine coal on board cars shall not exceed the price prescribed by the President and the Fuel Administrator for coal at the mine.

The first paragraph of the above ruling was amended on November 10, 1917, to read as follows:

Coal sold at a mine to be delivered direct to the customer by wagon or truck may be sold at a price f. o. b. mines to be fixed by the local fuel administration committee in the community in which coal is delivered for consumption, subject to the approval of the State fuel administrator. Such local committee shall also in such cases fix the haulage rates to be charged where the coal is delivered by the mine operator.

Specially prepared coal and coal not properly picked or cleaned.—On March 11, 1918, provision was made for the sale of coal not conforming to requirements for preparation:

Inspectors are authorized to condemn at the mines any coal loaded in railroad cars which, in their judgment, is not properly prepared, and any inspector finding unmerchantable coal shall immediately notify the district representative and the operator by wire or in person and in writing, giving the car numbers and initials of any and all cars so rejected and stating the facts on which such action was based. A copy of such notice shall be immediately mailed to the United States Fuel Administration, department of inspection, and to the district representative. If the district representative approves the inspection report, he shall so notify the operator at once, in which case, unless the operator unloads and reprepares the rejected coal, the consignee shall be permitted to deduct 50 cents per ton from the authorized price for the grade of coal with which the car is loaded: *Provided, however,* The consignee, after examining the coal may, at his option, pay and the operator may receive the full authorized price.

This regulation was revoked and a new one established on June 1, 1918:

If any such inspector shall find that any coal is about to be shipped which, in his opinion, does not conform to the requirements of section 1 hereof, said inspector is hereby authorized to condemn such coal. The district representative, if he approves of such condemnation, shall immediately give notice of his approval to the operator producing such coal, confirming such notice in writing, and thereupon such operator shall have the following options:

To take such steps as may be necessary, after unloading the same, if in railroad cars or barges, to make the same conform to the provisions of section 1 hereof to the satisfaction of the inspector condemning the same; or

To ship such coal and invoice the same with a deduction of 50 cents per net ton from the applicable Government mine price or from the contract price if such coal has been sold under contract and the contract price differs from said Government price.

An increased price was allowed for specially prepared coal in a regulation effective April 1, 1918:

Picked, spiralized, and washed coal.—When coal, in addition to being screened into sizes, has been picked upon tables or loading booms, or has been cleaned by means of spiral or other mechanical separators or washers, in such manner that the fuel value and the cost of preparation are substantially increased and

the total output substantially decreased through removal of waste and impurities, said coal may be sold, but only for shipment loaded on board cars at the mine on or before July 31, 1918, at an increase in price of not to exceed 20 cents per net ton above the applicable Government selling price at the date of shipment for the respective grades, defined as "run of mine" and "prepared sizes," that are actually picked, spiralized, or washed, if the producer thereof has, in the manner provided in Sections III and IV of this regulation, obtained a temporary permit for making such additional charge. In cases where the above maximum of 20 cents is not sufficient, in the opinion of the United States Fuel Administrator, to compensate for this work a special temporary permit authorizing a larger increase to such amount and under such circumstances as the United States Fuel Administrator may deem proper, may in the discretion of the United States Fuel Administrator be issued as hereinafter in Sections III and IV provided.

This order, too, was revoked and a new one became effective June 1, 1918.

Mechanical preparation.—No special allowance will be made for the ordinary method of cleaning or picking coal employed in any district, but a special allowance will be made for coal mechanically washed or extraordinarily cleaned or picked in such manner that the fuel value of the coal has been substantially increased by the removal of waste and impurities.

COKE.

The price of coke, under regulations announced November 9, 1917, were to be understood as the maximum price per ton of 2,000 pounds f. o. b. cars at the plant where it was manufactured.

GENERAL ORDERS IN REGARD TO COKE.

APRIL 1, 1918.

That all cases of sale of coke, manufactured east of the 94th meridian, to consumers located west of the 115th meridian, where the seller assumes the responsibility for the quality and delivery of such coke, and extends credit to, and carries the account of, the purchaser in accordance with the usual trade practices, there may be added 5 per cent to the established price of the coke f. o. b. cars at the point of manufacture.

APRIL 26, 1918.

(1) The maximum price of coke sold and delivered for export to foreign countries, or to a possession or dependency of the United States, shall be the price prescribed for such coke at the ovens at the time such coke left the ovens, plus transportation charges from the ovens to the port of loading, plus 60 cents per ton of 2,000 pounds.

(2) To this price, computed as above, the seller of the coke or such other agency as performs the actual work of loading the vessel may add the customary and proper charges, if any, for unloading from railroad cars into ships, for towing, elevation, trimming, railroad and ship demurrage, and other port charges.

(3) The additional 60 cents per ton of 2,000 pounds herein authorized may not be added to the price of coke as figured above where the coke is delivered solely by rail to foreign countries.

(4) No coke shall be sold and delivered for export to foreign countries, or to a dependency or possession of the United States by ocean transportation before the vendor has secured a permit from the United States Fuel Administration authorizing the sale. Applications for such permits should be made to the coke division of the United States Fuel Administration and should contain, first, the name of the consumer and the destination of the coke; second, the tonnage to be shipped.

(5) The 5 per cent provided for in the order of March 26, 1918, for coke manufactured east of the 94th meridian and delivered to customers located west of the 115th meridian, may be added to the established price for all coke exported from the Pacific coast in addition to the 60 cents allowed in this order.

Paragraph 4 of this order was revoked on December 19, 1918.

Beehive coke.—The maximum prices for various grades of beehive coke made in the districts west of the Mississippi River, except as modified, were to bear the same ratio to the established price of the coal from which the coke was made as the average contract prices of the same grades of coke had to the average prices of coal during the years 1912 and 1913.

The expression "72-hour selected foundry coke" was to cover only coke selected in accordance with the usual trade practice for foundry use, and the prices named for 72-hour selected foundry coke were in no case to be charged for any shipments to blast furnaces for smelting iron or other metal.

To these base prices, as tabulated, there was to be added the freight rate from the plant where the competing beehive coke was produced, except that there should be added, in addition, for coke manufactured in New England, 7 cents for each 5 cents above 60 cents in the freight rate charges per ton (2,240 pounds) of coal for water transportation on the coal used in the manufacture of such coke.

District.	Date when effective.	48-hour blast furnace.	72-hour selected foundry.	Crushed over 1-inch size.
Beehive coke east of the Mississippi River, base prices....	Nov. 10, 1917	\$6.00	\$7.00	\$7.30
<i>Modifications.</i>				
Alabama:				
From coal mined in Black Creek, Brookwood, and Blue Creek districts.....	Jan. 30, 1918	8.00	8.00	8.00
Manufactured by Empire Coal Co. at Empire.....	do.....	8.25	8.25	8.25
From coal mined in Big Seam district.....	do.....	6.75	6.75	6.75
Coke made from coal mined in the Big Seam district..	Feb. 15, 1918	6.75	6.75	.....
New Castle Coal Co.....	do.....	7.50	7.50	.....
United States Cast Iron Pipe & Foundry Co.....	do.....	8.50	8.50	.....
From coal mined from the Nickel Plate seam.....	Mar. 20, 1918	7.00	7.00	7.00
U. S. C. S. & F. Co., if coke is made from Black Creek coal.....	Mar. 30, 1918	.....	8.75	.....
Coke made from coal mined from the Black Creek, Blue Creek, and Brookwood districts.....	do.....	8.00	8.75	.....
Empire Coal Co.....	Feb. 15, 1918	8.25	8.25	.....
Coke made from coal mined in the Nickel Plate district.	Mar. 20, 1918	7.00	7.00	.....
Empire Coal Co. at Empire.....	Apr. 15, 1918	.....	8.75	.....
Coke made at the plant of the Newcastle Coal Co., at New Castle, Jefferson County.....	June 28, 1918	.....	8.25	.....
Coke made from coal mined from the upper bench of the Big Seam.....	Aug. 14, 1918	8.50	9.50	.....
Coke from washed coal District No. 1, except the Newcastle Coal Co.....	Sept. 3, 1918	7.00	8.00	.....
Prepared sizes above $\frac{1}{4}$ inch.....				\$8.30
Prepared sizes below $\frac{1}{4}$ inch.....				6.00
Breeze.....				3.50
Yolande Coal & Coke Co., and District No. 2, except the Empire Coal Co.....	do.....	8.75	9.75	.....
Prepared sizes above $\frac{1}{4}$ inch.....				\$10.05
Prepared sizes below $\frac{1}{4}$ inch.....				7.75
Breeze.....				4.38
Newcastle Coal Co. and district No. 3, except the Gulf State Steel Co. at Sayre, and the Yolande Coal & Coke Co.....	do.....	7.85	8.85	.....
Prepared sizes above $\frac{1}{4}$ inch.....				\$9.15
Prepared sizes below $\frac{1}{4}$ inch.....				6.85
Breeze.....				3.93
Empire Coal Co.....	do.....	10.50	10.50	.....
Prepared sizes above $\frac{1}{4}$ inch.....				\$10.80
Prepared sizes below $\frac{1}{4}$ inch.....				9.50
Breeze.....				5.25
Gulf State Steel Co. at Sayre.....	do.....	8.50	9.50	.....
Prepared sizes above $\frac{1}{4}$ inch.....				\$9.80
Prepared sizes below $\frac{1}{4}$ inch.....				6.50
Breeze.....				4.25
Colorado.....	{ Apr. 15, 1918	8.50	9.50	.....
	{ May 8, 1918	.....	.....	8.80
Georgia:				
Durham Coal & Coke Co.....	Dec. 31, 1917	8.00	8.00	8.00
Walker County.....	Feb. 15, 1918	8.75	8.75	.....
Kentucky:				
Marrowbone Mining Co. at Lookout, Pike County.....	July 1, 1918	7.75	.....	.....
Pike County, except at the plant of the Marrowbone Mining Co.....	July 29, 1918	6.50	7.50	.....
Hopkins County.....	Nov. 18, 1918	7.25	8.25	.....

District.	Date when effective.	48-hour blast furnace.	72-hour selected foundry.	Crushed over 1-inch size.
<i>Modifications—Continued</i>				
New Mexico.....	Apr. 26, 1918	\$8.50	\$9.50	.....
Oklahoma:				
McCurtain Coke Co., for coke f. o. b. Panther on the main line of the Fort Smith & Western R. R.	Feb. 15, 1918	10.75	11.75	.....
Howe plant of the Howe-McCurtain Coke Co.	May 13, 1918	10.75	11.75	.....
Pennsylvania:				
Taylor and McCoy at Glen White, Blair County.....	Dec. 31, 1917	7.25	8.25	.....
Indiana County: Coke made from washed coal taken exclusively from the lower bench of coal from the upper Fremont seam, if the ash exceeds 10 per cent or if the sulphur exceeds 0.9 per cent.	Mar. 1, 1918	8.00	8.00	.....
If the ash is less than 10 per cent and the sulphur is less than 0.9 per cent.	do.....	8.50	8.50	.....
Cambria County.....	Mar. 20, 1918	7.25	8.25	.....
Tennessee:				
Sewanee Fuel & Iron Co., Lona Rock ovens at Tracy City.....	Dec. 31, 1917	8.25	8.25	.....
Coalmont.....	Apr. 26, 1918	7.25	8.25	.....
Cumberland County.....	June 25, 1918	7.25	8.25	.....
Utah.....	July 9, 1918	8.50	8.50	.....
Virginia: Wise and Lee Counties.....	May 13, 1918	7.25	8.25	.....
Washington.....	Mar. 30, 1918	10.00	11.00	.....
West Virginia:				
Babcock Coal & Coke Co., Scotia Coal & Coke Co., Fire Creek Coal & Coke Co., all in Fayette County.....	Dec. 31, 1917	8.00	8.00	\$8.00
New River district on Chesapeake & Ohio R. R. running from Thurmond north as far as Elmo and on the Chesapeake & Ohio R. R., and Kanawha, Glen Jean and Eastern Railroads running from Thurmond as far southwest as McDonald.....	Feb. 15, 1918	8.00	8.00	8.00
Preston County.....	Mar. 1, 1918	6.75	7.75	.....
Flat Top or Pocahontas district.....	do.....	8.00	8.00	.....
Coke made at Meridan, Barbour County.....	do.....	6.75	7.75	.....
Tucker County.....	Mar. 20, 1918	7.00	8.00	.....
Kanawha district, Fayette County.....	Mar. 30, 1918	6.50	7.50	.....
Nicholas County.....	do.....	7.75	7.75	.....
New River district.....	Feb. 15, 1918	8.00	8.00	.....
Marion and Harrison Counties.....	Apr. 26, 1918	6.25	7.25	.....
Barbour and Randolph Counties.....	do.....	6.75	7.75	.....
Preston County.....	Mar. 30, 1918	6.75	7.75	.....
Monongalia County.....	Apr. 15, 1918	6.25	7.25	.....
Austed.....	June 25, 1918	7.00	8.00	.....
New River district.....	June 26, 1918	8.00	.....	.....
Do.....	July 12, 1918	8.00	8.00	8.00
Logan County.....	Aug. 14, 1918	6.75	7.75	.....
Taylor County.....	Nov. 18, 1918	6.75	7.75	.....

¹ Any grade.

NOTE.—The following classifications and prices were announced July 8, 1918:

The maximum price for crushed coke over $\frac{1}{4}$ -inch size shall be the maximum price for 72-hour selected foundry coke, plus 30 cents.

The maximum price for all prepared sizes of clean dry screened coke under $\frac{1}{4}$ -inch size shall be \$1 less than the price for blast-furnace coke made at beehive ovens where such coke is produced.

The maximum price for breeze shall be one-half the price established for blast-furnace coke made in beehive ovens where such breeze is produced.

The maximum price for mixed sizes of properly screened and cleaned beehive or by-product coke, suitable for domestic purposes, shall be \$1 less than the maximum Government price for selected foundry coke, f. o. b. cars at the same point, effective July 25, 1918. This was modified on Sept. 30, 1918, and all coke as described above and reclaimed from accumulated breeze piles shall be \$5.50.

BY-PRODUCT COKE.

District.	Date when effective.	Run of oven.	Selected foundry.	Crushed over 1 inch in size.
By-products coke, base prices.....	Nov. 19, 1917	\$6.00	\$7.00	\$6.50
<i>Modifications.</i>				
Alabama:				
Coke made from coal mined in the Nickel Plate district.	Mar. 20, 1918	7.00	7.00	.....
From washed coal.....	Sept. 1, 1918	5.70	6.70	.....
All by-product coke made in Alabama.....	do.....	7.75	8.75	.....
Prepared sizes above $\frac{1}{4}$ inch.....				\$8.25
Prepared sizes below $\frac{1}{4}$ inch.....				6.75
Breeze.....				3.88
Tennessee: Chattanooga.....	Mar. 1, 1918	8.25	9.25	8.75
Washington.....	Mar. 30, 1918	10.00	11.00	.....

ORDER OF JULY 8, 1918.

The maximum price for crushed coke over $\frac{1}{2}$ -inch sizes, produced by any by-product oven plant, was to be the maximum price for run of oven coke, plus 50 cents.

The maximum price for all prepared sizes of clean dry screened coke under $\frac{1}{2}$ -inch size, was to be \$1 per ton less than the Government price for run of oven coke made in by-product ovens where such coke was produced.

The maximum price of breeze was to be one-half the Government price for run of oven coke made in by-product ovens where such coke was produced.

ORDER OF JULY 24, 1918.

The maximum price for mixed sizes of properly screened and cleaned by-product coke suitable for domestic purposes, was to be \$1 less than the maximum Government price for selected foundry coke f. o. b. cars at the same point.

ORDER OF SEPTEMBER 1, 1918.

Thirty cents was thereafter to be deducted from all prices for by-product coke as previously published, except in the State of Washington.

Gas coke.—Under the original orders regulating the sale of coke, the maximum price of gas coke sold for industrial or metallurgical use was to be as that of the Government price for the corresponding grade of coke produced in by-product ovens.

Gas coke sold for household purposes was to be sold at the Government price established for anthracite coal in the same locality.

On July 8 an order was issued for more definite control of gas coke prices.

District.	Date when effective.	Base price.
Localities where anthracite coal is not obtainable:		
Run of retorts.....	July 9, 1918	\$5.50
Screened above $\frac{1}{2}$ -inch size.....	do.....	6.00
Screened and sized about $\frac{1}{2}$ -inch size.....	do.....	6.50
Screened and sized between $\frac{1}{2}$ and $\frac{3}{4}$ inch.....	do.....	4.50
Run of retorts.....	Aug. 1, 1918	5.50
Screened above $\frac{1}{2}$ -inch size.....	do.....	6.00
Prepared sizes above $\frac{1}{2}$ -inch size.....	do.....	6.50
Prepared sizes below $\frac{1}{2}$ -inch size.....	do.....	4.50
Colorado, except at Colorado Springs:		
Run of retorts.....	Sept. 30, 1918	5.50
Screened over $\frac{1}{2}$ inch.....	do.....	6.00
Prepared sizes above $\frac{1}{2}$ -inch.....	do.....	6.50
Prepared sizes below $\frac{1}{2}$ -inch.....	do.....	4.50
Run of retort.....	Nov. 27, 1918	6.00
Run of retort, screened over $\frac{1}{2}$ -inch screen.....	do.....	6.50
Prepared sizes above $\frac{1}{2}$ -inch.....	do.....	7.00
Prepared sizes below $\frac{1}{2}$ -inch.....	do.....	5.00
Colorado Springs.....		(¹)
Indiana, at Evansville:		
Run of retort.....	Nov. 4, 1918	7.45
Run of retort, screened over $\frac{1}{2}$ -inch screen.....		7.95
Prepared sizes above $\frac{1}{2}$ -inch.....		8.45
Prepared sizes below $\frac{1}{2}$ -inch.....		6.45

¹ Prices as scheduled, plus 50 cents per ton.

Where anthracite coal was obtainable, the maximum prices of various grades of gas coke were to be as follows:

Screened and sized above $\frac{1}{2}$ inch, the same price as that established for stove anthracite in the same locality.

Run of retorts screened about $\frac{1}{2}$ inch, 25 cents less than the price of stove anthracite.

Run of retorts not screened, 75 cents less than the price of stove anthracite.

The maximum price of breeze was to be one-half the Government price for run of retorts coke unscreened, made in gas retorts where such breeze was produced.

An order of August 1, 1918, superseding the above, provided that the maximum price for screened and sized above $\frac{1}{4}$ inch should be the same as the Government price for the stove anthracite f. o. b. cars at the mines in that district, which took the lowest freight rate to the plant where the coke was produced, plus that freight rate.

Other grades were priced as before, with the addition of said freight rate.

CHARCOAL.

Commodity.	Date when effective.	Price per bushel.
		Cents.
Lump in bulk.....	July 9, 1918	30
Lump in bags.....	.....do.....	32
Screenings in bags.....	.....do.....	20

NOTE.—These prices are per bushel of 20 pounds f. o. b. cars at point of shipment.

An order of August 13, 1918, permitted the completion, at the contract price, of contracts for the sale of charcoal, entered into prior to July 8, 1918.

JOBBER'S MARGINS AND DISTRIBUTORS' COMMISSIONS.

An Executive order of the President of August 23, 1917, established the first margins for jobbers along with the President's prices for anthracite coal:

The following regulations shall apply to the intrastate, interstate, and foreign commerce of the United States, and the prices and margins referred to herein shall be in force pending further investigation or determination thereof by the President.

JOBBER'S MARGINS.

1. A coal jobber is defined as a person (or other agency) who purchases and resells coal to coal dealers or to consumers without physically handling it on, over, or through his own vehicle, dock, trestle, or yard.

2. For the buying and selling of bituminous coal a jobber shall not add to his purchase price a gross margin in excess of 15 cents per ton of 2,000 pounds, nor shall the combined gross margins of any number of jobbers who buy and sell a given shipment or shipments of bituminous coal exceed 15 cents per ton of 2,000 pounds.

3. For buying and selling anthracite coal a jobber shall not add to his purchase price a gross margin in excess of 20 cents per ton of 2,240 pounds when delivery of such coal is effected at or east of Buffalo. For buying or selling anthracite coal for delivery west of Buffalo a jobber shall not add to his purchase price a gross margin in excess of 30 cents per ton of 2,240 pounds. The combined gross margins of any number of jobbers who buy and sell a given shipment or shipments of anthracite coal for delivery at or east of Buffalo shall not exceed 20 cents per ton of 2,240 pounds, nor shall such combined margins exceed 30 cents per ton of 2,240 pounds for the delivery of anthracite coal west of Buffalo; provided that a jobber's gross margin realized on a given shipment or shipments of anthracite coal may be increased by not more than 5 cents per ton of 2,240 pounds when the jobber incurs the expense of rescreening it at Atlantic or lake ports for transshipment by water.

Additional regulations were announced by the United States Fuel Administration on October 6, 1917.

REGULATIONS CONCERNING JOBBERS.

Operators who maintain their own sales department, whether in their own name or under a separate name, and dispose of coal directly to the dealer or consumer shall not charge any jobber's commission. A jobber must be entirely independent of the operator in fact as well as in name in order to be entitled to charge a jobber's commission.

Free coal shipped from the mines subsequent to the promulgation of the President's order fixing the price for such coal shall reach the dealer at not

more than the price fixed by the President's order plus only the prescribed jobbers' commission (if the coal has been purchased through a jobber) and transportation charges.

A jobber who had already contracted to buy coal at the time of the President's order fixing the price of such coal and who was at that time already under contract to sell the same may fill his contract to sell at the price named therein.

A jobber who at the time of the President's order fixing the price of the coal in question at the mine had contracted to buy coal at or below the President's price and at that time had no contract to sell such coal shall not sell the same at a price higher than the purchase price plus the proper jobber's commission as determined by the President's regulation of August 23, 1917.

A jobber who at the time of the President's order fixing the price of the coal in question was under contract to deliver such coal at a price higher than a price represented by the price fixed by the President or the Fuel Administrator for such coal plus a proper jobber's commission as determined by the President's regulation of August 23, 1917, shall not fill such contract with coal purchased after the President's order became effective and not contracted for prior thereto at a price in excess of the President's price plus the proper jobber's commission.

A jobber who at the date of the President's order fixing the price of the coal in question held a contract for the purchase of coal without having already sold or contracted to sell such coal shall not sell such coal at more than the price fixed by the President or the Fuel Administrator for the sale of such coal after the date of such order plus the jobber's commission as fixed by the President's regulation of August 23, 1917.

Every jobber of coal or coke in the United States shall file with the Federal Trade Commission, Washington, D. C., on or before October 25, 1917, a statement showing (1) his name; (2) post-office address; (3) date of the establishment of his business; (4) names of stockholders, members, and partners of the jobbing concern; (5) financial interests of stockholders, members, and partners of the jobbing concern in any mine producing coal. Any jobbing concern which may be established after the issuance of this regulation shall immediately upon its organization file a similar statement with the Federal Trade Commission.¹

On March 15, 1918, the President issued a proclamation licensing all persons engaged in the business of distributing coal and coke except those exempted by Congress. Licenses were required by April 1, 1918, and licenses included jobbers, brokers, selling agents, purchasing agents, wholesalers or dealers in any capacity.

A license board was appointed by the Fuel Administration, and regulations governing licenses were effective April 1, 1918.²

RETAIL PRICES.

Local committees were organized for determining the proper basis for sales by retail dealers.

Retail gross margins were established by the Fuel Administrator on October 1, 1917.

On and after the 1st day of October, 1917, in making prices and sales to consumer, the retail gross margin (as hereinafter defined) added by any retail dealer to the average cost (determined as hereinafter provided) of any size or grade of coal or coke for each class of business shall not exceed the average gross margin added by such dealer for the same size or grade for each class of business during the calendar year 1915, plus 30 per cent of said retail gross margin for the calendar year 1915: *Provided, however*, That the retail gross margin added by any retail dealer shall in no case exceed the average added by such dealer for the same size, grade, and class of business during July, 1917.

By this order retailers are required to fix a retail gross margin which may

¹ Modifications of these regulations issued from time to time appear in pp. 444-452 of the General Orders, Regulations, and Rulings of the Fuel Administration.

² General Orders, Regulations, and Rulings of the Fuel Administration, pp. 452-467.

be less than but shall not in any instance exceed the margin added by them in 1915 plus 30 per cent thereof.

Definition of retail gross margin.—The retail gross margins of the different classes of retail coal and coke dealers are defined as:

(1) The difference between the price charged by a retail coal or coke dealer to consumers and the average cost of coal or coke to such retailer, free on board railroad cars at his railroad siding, yard, pocket, or trestle, when such coal or coke is received by him by rail.

(2) The difference between the price charged by a retail coal or coke dealer to consumers and the average cost of coal or coke to such retailer free alongside his wharf, pocket, or water yard, when such coal or coke is received by him by water.

(3) The difference between the price charged by a retail coal or coke dealer to consumers and the average cost of coal or coke to such retailer at wholesalers' pockets, trestles, railroad sidings, mines, tipples, dumps, docks, yards, or wharves.¹

PETROLEUM.

There was never any Government regulation of petroleum prices, but those prices were stabilized through the cooperation of the Petroleum War Service Committee with the Oil Division of the Fuel Administration.

The chief of the oil division in a letter to the chairman of the War Industries Board, under date of April 25, 1918, made the following statement:

"The petroleum war service committee, as a result of an extended conference with me on the subject of prices, have requested that prices of petroleum products be fixed in the same way that steel prices were fixed. If this be done, it will greatly simplify the matter of allocation of purchases."²

The matter was referred to the price-fixing committee and some discussion of it appears in the minutes of the price-fixing committee for July 15, 1918, but no action was ever taken.³

The petroleum war service committee finally worked out a stabilization policy acceptable to the oil division.

This plan of August, 1918, was effective on contracts entered into after May 17, 1918, and was to continue in force until November 1, 1918, or thereafter. This plan applied to certain petroleum producing districts:

For the Appalachian division: 1. That the large purchasing companies continue to purchase crude oil at their posted market price, and that all other purchasers who now pay a premium for crude oil be hereafter permitted to pay a premium not to exceed 10 cents per barrel above the posted prices for the various grades of crude oil.

2. That all producers are requested to make monthly sales of their crude oil.

The Mid-continent division: 1. That the large purchasing companies continue to purchase crude oil at their posted price in the Mid-continent field, and that all other purchasers who now pay a premium for crude oil be permitted hereafter to pay up to a maximum premium above posted market prices as follows:

For Cushing crude, a maximum premium of 75 cents per barrel.

For Yale and Inay, a maximum premium of 50 cents per barrel.

For Garber crude, a maximum premium of \$1.50 per barrel.

For Billings crude, a maximum premium of 75 cents per barrel.

For Kay County crude, a maximum premium of 75 cents per barrel.

For Healdon crude, a maximum premium of 30 cents per barrel.

For all other crudes for the whole Mid-continent division, including Kansas, Oklahoma, and northern Texas, a maximum premium not to exceed 25 cents per barrel with the strict understanding that in no district in which premiums are being paid of less than 25 cents per barrel, will the United States Fuel Administrator permit the paying of a higher premium than is now in effect.

¹ Detailed regulations appear in pp. 199-204 of the General Orders, Rules, and Regulations.

² Minutes of War Industries Board and letter in correspondence files.

³ Minutes of price-fixing committee, Vol. VI, July 15, 1918.

Gulf coast and northern Louisiana division: 1. That the large purchasing companies in the Gulf coast territory be requested to establish a posted price for crude oil effective as of August 1, 1918, of \$1.80 per barrel, and continue to pay said price until November, 1918; and that a maximum premium be established above the posted price of 10 cents per barrel, with the strict understanding that in no district in which premiums are being paid of less than 10 cents per barrel, will the United States Fuel Administrator permit the paying of a higher premium than is now in effect.

2. That the large purchasing companies establish a differential of 25 cents per barrel below the posted price of Gulf coast oil for northern Louisiana heavy oil below 32d. gravity, and that a premium of 10 cents per barrel be permitted on this grade of oil; that on light crude oil a premium of 25 cents per barrel be permitted, with the strict understanding that in no case where premiums of less than 10 cents and 25 cents per barrel, respectively, have been paid, will the Fuel Administrator permit the paying of higher premiums than are now in effect.¹

The Fuel Administrator fixed the price of certain petroleum products to purchasing agents of allied Governments on purchases from May 20, 1918, to July 19, 1918:

F. O. B. GULF PORTS.

	Price per gallon (cents).	Pounds per gallon.
Fuel oil, British Admiralty specifications, 150 Abel flash.....	5.50	7½
Fuel oil, United States Navy specifications.....	5.25	7½
Standard white refined kerosene, 135 fire test, minimum gravity 44° Baumé.....	7.50	6½
Gasoline, United States Navy specifications.....	21.00	6
Aviation naphtha, British specifications, 302° F. final boiling point.....	30.00	5½

F. O. B. NORFOLK, BALTIMORE, PHILADELPHIA, AND NEW YORK.

Fuel oil, United States Navy specifications.....	7.50	7½
Standard white refined kerosene, 135 fire test, minimum gravity 44° Baumé.....	8.25	6½
Gasoline, United States Navy specifications.....	23.50	6
Aviation naphtha, British specifications, 302° F. final boiling point.....	32.00	5½
Mexican reduced oil, 14/16 gravity for bunker purposes.....	6.00	7½

4. METALS AND METAL PRODUCTS.

The formal fixing of maximum prices in this group began on September 21, 1917, when the price of copper was fixed by the War Industries Board. Following this date price fixing was extended, first, by the War Industries Board, and after April, 1918, by the price-fixing committee, to cover other metals and their products.

A detailed summary of the Government regulations pertaining to the fixed price of aluminum, copper, iron, and steel, lead, manganese ore, nickel, platinum, quicksilver, silver, and zinc is presented in the following schedules:

ALUMINUM.

In the fall of 1917 the Aluminum Co. of America agreed to accept direct and indirect Government orders at the current price of 30 cents, base. If the price were fixed later at a lower point, the United States Government would receive the difference between this contract price and the fixed price.

On March 2, 1918, the War Industries Board and the producers agreed upon a maximum base price of 32 cents per pound f. o. b. United States producing plant for 50 tons and over of ingot of 98 to 99 per cent.

The conditions accompanying the agreement were:

First, the producers of aluminum will not reduce the wages now being paid; second, aluminum shall be sold to the public in the United States and to the Allies at the United States Government price; third, they will take the necessary measures, under the direction of the War Industries Board, for the distribution of aluminum to prevent it from falling into the hands of speculators who might increase the price to the public; and, fourth, they will pledge themselves to exert every effort necessary to keep up the production of aluminum so as to insure an adequate supply so long as the war lasts.

After an investigation by the price-fixing committee and the Federal Trade Commission of the costs of producing aluminum, the following announcement was made on May 28, 1918:

The President has approved an agreement made between the producers of aluminum and the price-fixing committee of the War Industries Board (after investigations by this committee in conjunction with the Federal Trade Commission as to the cost of production) that the new maximum base price for aluminum, effective June 1, 1918, to September 1, 1918, shall be 33 cents per pound f. o. b. United States producing plants, for 50 tons and over, of ingot of 98 to 99 per cent. Differentials for sheet, rod, and wire will be increased by approximately 12½ per cent; differentials for alloys will remain as heretofore, i. e., those approved by the price-fixing committee of the War Industries Board on March 3, 1918.

The new prices will be effective on deliveries made during the period from June 1, 1918, to September 1, 1918, on contracts made during said period; and furthermore, the new prices will be effective on deliveries made during said period on existing contracts which specify that the price shall be that in force at the time of delivery. Deliveries made during the period June 1, 1918, to September 1, 1918, on other contracts shall be at the price stated in such contracts, except that on existing "direct and indirect Government contracts" containing a provision that refund is to be made of the difference between the price stated in the contract and the "Government fixed price, if, as, and when

¹ Quoted from the Plan to Stabilize Prices and Maintain Uninterrupted Flow of Crude, issued by the national petroleum war service committee, New York City, Aug. 18, 1918.

made," such difference shall be refunded on deliveries made during the period from June 1, 1918, to September 1, 1918, on presentation of proper proof that the purchasing Government gets the benefit of the refund.

The conditions are as formerly: First, the producers of aluminum will not reduce the wages now being paid; second, aluminum shall be sold to the United States Government, to the public in the United States, and to the allied governments at the same maximum base price; third, they will take the necessary measures, under the direction of the War Industries Board, for the distribution of aluminum to prevent it from falling into the hands of speculators who might increase the price to the public; and, fourth, they will pledge themselves to exert every effort necessary to keep up the production of aluminum so as to insure an adequate supply so long as the war lasts.

The prices of June 1, 1918, were continued on September 1, 1918, and remained effective until March 1, 1919.

The following prices represent the official schedules issued by the nonferrous metals section of the War Industries Board:

ALUMINUM.

[Prices in cents per pound.]

	Ingot.					
	Mar. 6-May 31, 1918.			June 1, 1918-Mar. 1, 1919.		
	1-ton lots.	15-ton lots.	50-ton lots.	1-ton lots.	15-ton lots.	50-ton lots.
99 per cent grade.....	32.20	32.10	32.00	33.20	33.10	33.00
94 per cent grade.....	31.40	31.30	31.20	32.40	32.30	32.20
98 per cent grade (granulated).....	32.40	32.30	32.20	33.40	33.30	33.20
94 per cent (granulated).....	31.60	31.50	31.40	32.60	32.50	32.40
No. 12 alloy.....	32.40	32.30	32.20	33.40	33.30	33.20

F. o. b. producing plant (extras):	Cents per pound.
For guaranteed 99 per cent (above the price of 98 per cent).....	20
For shipment from warehouse (plus freight from producing plant).....	50
For 500 pounds to 1,999 pounds.....	1
For 50 pounds to 499 pounds.....	3
For less than 50 pounds.....	5

FLAT SHEET.

[Prices in cents per pound.]

Gauge.	Mar. 6-May 31, 1918.			June 1, 1918-Mar. 1, 1919.		
	1-ton lots.	15-ton lots.	50-ton lots.	1-ton lots.	15-ton lots.	50-ton lots.
Nos. 18 and heavier, 3 to 60 inches.....	40.40	40.20	40.00	42.40	42.20	42.00
Nos. 19 and 20, 3 to 60 inches.....	41.40	41.20	41.00	43.50	43.30	43.10
Nos. 21 to 24, inclusive	3 to 30 inches.....	43.40	43.20	43.00	45.80	45.60
	30 to 48 inches.....	45.40	45.20	45.00	48.00	47.80
	48 to 60 inches.....	48.40	48.20	48.00	51.40	51.20
Nos. 25 and 26	3 to 30 inches.....	46.40	46.20	46.00	49.20	49.00
	30 to 48 inches.....	48.40	48.20	48.00	51.40	51.20
No. 27	3 to 30 inches.....	47.40	47.20	47.00	50.30	50.10
	30 to 48 inches.....	50.40	50.20	50.00	53.70	53.50
No. 28	3 to 30 inches.....	49.40	49.20	49.00	52.50	52.30
	30 to 48 inches.....	52.40	52.20	52.00	55.90	55.70
No. 29	3 to 30 inches.....	52.40	52.20	52.00	55.90	55.70
	30 to 48 inches.....	56.40	56.20	56.00	60.40	60.20
No. 30, 3 to 30 inches.....	54.40	54.20	54.00	58.20	58.00	57.80

F. o. b. Producing plant (extra):	Per pound.
For guaranteed 99 per cent.....	20.20
For shipment from warehouse (plus freight from producing plant).....	1.00
For 500 pounds to 1,999 pounds.....	.01
For 50 pounds to 499 pounds.....	.03
For less than 50 pounds.....	.05

NOTE.—Grades 33 and 98 per cent.

FLAT SHEET CIRCLES.

Nos. 18 and heavier, 3 to 60 inches.....	42.40	42.20	42.00	44.70	44.50	44.30
Nos. 19 and 20, 3 to 60 inches.....	43.40	43.20	43.00	45.80	45.60	45.40
Nos. 21 to 24, inclusive 3 to 30 inches.....	45.40	45.20	45.00	48.00	47.80	47.60
30 to 48 inches.....	47.40	47.20	47.00	50.20	50.10	49.90
48 to 60 inches.....	50.40	50.20	50.00	53.70	53.50	53.30
Nos. 25 and 26..... 3 to 30 inches.....	48.40	48.20	48.00	51.40	51.20	51.00
30 to 48 inches.....	50.40	50.20	50.00	53.70	53.50	53.30
No. 27..... 3 to 30 inches.....	49.40	49.20	49.00	52.50	52.30	52.10
30 to 48 inches.....	52.40	52.20	52.00	55.90	55.70	55.50
No. 28..... 3 to 30 inches.....	51.40	51.20	51.00	54.80	54.60	54.40
30 to 48 inches.....	54.40	54.20	54.00	58.20	58.00	57.80
No. 29..... 3 to 30 inches.....	54.40	54.20	54.00	58.20	58.00	57.80
30 to 48 inches.....	58.40	58.20	58.00	62.70	62.50	62.30
No. 30, 3 to 30 inches.....	58.40	58.20	58.00	60.40	60.20	60.00

F. o. b. producing plant (extras) :

Per pound.

For guaranteed 99 per cent.....	\$0.20
For shipment from warehouse (plus freight from producing plant).....	1.00
For 500 pounds to 1,999 pounds.....	.01
For 50 pounds to 499 pounds.....	.03
For less than 50 pounds.....	.05

NOTE.—Grades 38 and 98 per cent.

17-L. FLAT SHEET.

Nos. 18 and heavier, 3 to 40 inches.....	59.40	59.20	59.00	63.80	63.60	63.40
Nos. 19 and 20, 3 to 24 inches.....	60.40	60.20	60.00	64.90	64.70	64.50
Nos. 21 to 24, inclusive, 3 to 24 inches.....	62.40	62.20	62.00	67.20	67.00	66.80
Nos. 25 and 26, 3 to 24 inches.....	65.40	65.20	65.00	70.50	70.30	70.10
No. 27, 3 to 24 inches.....	66.40	66.20	66.00	71.70	71.50	71.30
No. 28, 3 to 24 inches.....	68.40	68.20	68.00	73.90	73.70	73.50
No. 29, 3 to 24 inches.....	71.40	71.20	71.00	77.30	77.10	76.90
No. 30, 3 to 24 inches.....	73.40	73.20	73.00	79.50	79.30	79.10

F. o. b. producing plant (extras) :

Per pound.

For shipment from warehouse (plus freight from producing plant).....	\$1.00
For 500 pounds to 1,999 pounds.....	.01
For 50 pounds to 499 pounds.....	.03
For less than 50 pounds.....	.05

NOTE.—These prices include tempering. If untempered sheet is ordered, deduct 6 cents from above prices.

COILED SHEET.

Gauge.	Mar. 6–May 31, 1918.			June 1, 1918–Mar. 1, 1919.		
	1-ton lots.	15-ton lots.	50-ton lots.	1-ton lots.	15-ton lots.	50-ton lots.
Nos. 12 to 17, 3 to 18 inches.....						
Nos. 18 to 20, 3 to 16 inches.....						
Nos. 21 and 22, 3 to 15 inches.....	\$37.40	\$37.20	\$37.00	\$39.00	\$38.80	\$38.60
Nos. 23 and 24, 3 to 14 inches.....						
No. 25, 3 to 13 inches.....						
No. 26, 3 to 13 inches.....	38.40	38.20	38.00	40.20	40.00	39.80
Nos. 27 and 28, 3 to 12 inches.....	39.40	39.20	39.00	41.30	41.10	40.90
Nos. 29 and 30, 3 to 12 inches.....	41.40	41.20	41.00	43.50	43.30	43.10
Nos. 31 and 32, 3 to 12 inches.....	43.40	43.20	43.00	45.80	45.60	45.40
No. 33, 3 to 12 inches.....	45.40	45.20	45.00	48.00	47.80	47.60

F. o. b. producing plant (extras) :

Per pound.

For guaranteed 99 per cent.....	\$0.20
For shipment from warehouse (plus freight from producing plant).....	1.00
For 500 pounds to 1,999 pounds.....	.01
For 50 pounds to 499 pounds.....	.03
For less than 50 pounds.....	.05

NOTE.—Grades 38 and 98 per cent. Coiled sheet wider than the above (if within the limits of equipment) takes the price of flat sheet of the same gauge and width.

COILED SHEET CIRCLES.

Nos. 12 to 17, 3 to 18 inches.....	\$39.40	\$39.20	\$39.00	\$41.30	\$41.10	\$40.90
Nos. 18 to 20, 3 to 16 inches.....						
Nos. 21 and 22, 3 to 15 inches.....						
Nos. 23 and 24, 3 to 14 inches.....						
No. 25, 3 to 13 inches.....	40.40	40.20	40.00	42.40	42.20	42.00
No. 26, 3 to 13 inches.....						
Nos. 27 and 28, 3 to 12 inches.....						
Nos. 29 and 30, 3 to 12 inches.....						
Nos. 31 and 32, 3 to 12 inches.....	45.40	45.20	45.00	48.00	47.80	47.60
No. 33, 3 to 12 inches.....	47.40	47.20	47.00	50.30	50.10	49.90

F. o. b. producing plant (extras):	Per pound.
For guaranteed 99 per cent.....	\$0.20
For shipment from warehouse (plus freight from producing plant).....	1.00
For 500 pounds to 1,999 pounds.....	.01
For 50 pounds to 499 pounds.....	.03
For less than 50 pounds.....	.05

NOTE.—Grades 88 and 98 per cent. Coiled sheet circles wider than the above (if within the limits of equipment) take the price of flat sheet circles of the same gauge and diameter.

WIRE.

Gauge.	Spools (pounds).	Mar. 6 to May 31, 1918.		June 1, 1918, to Mar. 1, 1919.	
		On spools.	In coils.	On spools.	In coils.
Nos. 2 to 10, inclusive.....	50	\$0.44	\$0.415	\$0.465	\$0.437
Nos. 11 and 12.....	50	.47	.44	.499	.465
Nos. 13 and 14.....	35	.50	.465	.533	.493
Nos. 15 and 16.....	20	.57	.515	.611	.569
Nos. 17 and 18.....	20	.63	.565	.689	.646
Nos. 19 and 20.....	10	.75	.665	.714	.673
No. 21.....	10	.84	.74	.815	.763
No. 22.....	10	.96	.84	1.050	.915
No. 23.....	10	1.08	.94	1.185	1.033
No. 24.....	5 or 2	1.29	.....	1.421	.....
No. 25.....	5 or 2	1.49	.....	1.646	.....
No. 26.....	5 or 2	1.74	.....	1.928	.....
No. 27.....	1	2.09	.....	2.321	.....
No. 28.....	1	2.49	.....	2.771	.....
No. 29.....	1	3.44	.....	3.840	.....
No. 30.....	1	4.49	.....	5.021	.....

F. o. b. producing plant (extras):	Per pound.
For guaranteed 99 per cent.....	\$0.20
For shipment from warehouse (plus freight from producing plant).....	1.00
For 500 pounds to 1,999 pounds.....	.01
For 50 pounds to 499 pounds.....	.03
For less than 50 pounds.....	.05
Straightened and cut to length.....	.05

NOTE.—Grade 98 per cent.

STEEL METALLURGY ROD.

[Prices in cents per pound.]

	Mar. 6–May 31, 1918.			June 1–Mar. 1, 1919.		
	1-ton lots.	15-ton lots.	50-ton lots.	1-ton lots.	15-ton lots.	50-ton lots.
1/2 inch, 98 to 99 per cent rolled.....	33.20	33.10	33.00	34.30	34.20	34.10
1/2 inch, 94 to 98 per cent rolled.....	32.40	32.30	32.20	33.40	33.30	33.20

F. o. b. producing plant (extras):	Per pound.
For guaranteed 99 per cent (above the price of 98 per cent).....	\$0.20
For shipment from warehouse (plus freight from producing plant).....	1.00
For 500 pounds to 1,999 pounds.....	.01
For 50 pounds to 499 pounds.....	.03
For less than 50 pounds.....	.05

ROD.

	Mar. 6-May 31, 1918.	June 1, 1918- Mar. 1, 1919.
$\frac{1}{2}$ to $\frac{3}{4}$ inch, 98 per cent rolled and drawn.....	\$46.00	\$48.80
$\frac{1}{2}$ to 1 inch, advancing by 32ds.....	41.00	43.10
1 to 2 $\frac{1}{2}$ inches, advancing by 16ths.....		
2 $\frac{1}{2}$ to 3 $\frac{1}{2}$ inches, advancing by 8ths.....		
} 98 per cent rolled..		
F. o. b. producing plant (extras):		
For guaranteed 99 per cent.....		Per pound. \$0.20
For shipment from warehouse (plus freight from producing plant).....		1.00
For 500 pounds to 1,999 pounds.....		.01
For 50 pounds to 499 pounds.....		.03
For less than 50 pounds.....		.05

NOTE.—Price includes straightening and cutting to length.

COPPER.

At the request of the President, the War Industries Board on September 21, 1917, in conference with the producers of copper, fixed the maximum price of copper at 23.5 cents per pound. This price was made to apply to sale of copper to the United States and allied Governments and to the American public.

The agreement was subject to the following conditions: First, that the producers of copper will not reduce the wages now being paid; second, that they will sell to the United States Government, to the public in the United States, and to the allied Governments at not above the maximum price; third, that they will take the necessary measures, under the direction of the War Industries Board, for the distribution of copper to prevent it from falling into the hands of speculators, who might increase the price to the public; and fourth, that they will pledge themselves to exert every effort necessary to keep up the production of copper so as to insure an adequate supply so long as the war lasts.

The following summary table indicates the changes in the fixed price of copper made from time to time by the War Industries Board and the dates at which those changes were made:

Price per pound (cents).	Date when effective.	Date of revision.
23.5.....	September 21, 1917.....	January 23, 1918.
23.5.....	January 23, 1918.....	June 1, 1918.
23.5.....	June 1, 1918.....	August 15, 1918.
26 ¹	July 2, 1918.....	Do.
26 ²	August 15, 1918.....	November 1, 1918.
26.....	November 1, 1918.....	January 1, 1919. ³

¹ F. o. b. cars or lighters at refinery if shipped from eastern refineries; f. o. b. New York if shipped from western refineries.

² F. o. b. cars or lighters at eastern refineries; f. o. b. cars or lighters at Pacific coast refineries for Pacific coast destinations; f. o. b. cars or lighters New York if shipped to eastern or interior destinations from Pacific coast refineries or from refineries in the interior of the United States.

³ Price control was discontinued on this date.

On June 5, 1918, a schedule of differentials was announced. The schedule follows:

Differentials of June 5, 1918.

Listed rectangular cakes:		Slabs.....	\$1.50
801 to 1,500 pounds.....	\$3.50	Wire bars, 300 to 500 pounds.....	2.50
1,501 to 3,300 pounds.....	4.50	Wedge bars or cakes.....	3.50
3,301 to 4,800 pounds.....	6.00	Billets:	
Bowl cakes.....	8.00	4 and 5.....	15.00
Ingots.....	1.00	6.....	12.00
Round cakes.....	8.00	7 and 8.....	10.00

These differentials were recommended by the nonferrous metals section of the War Industries Board and approved by price-fixing committee.

IRON AND STEEL.

The first price agreement between the War Industries Board and representatives of the iron and steel industry was announced on September 24, 1917. Maximum prices of iron ore, coke, pig iron, steel bars, shapes, and plates were in that agreement fixed to become immediately effective and to be subject to revision on January 1, 1918.

On October 11 and again on November 5, 1917, schedules of basic maximum prices on additional intermediate and finished iron and steel products were announced. Maximum prices of other products in this group became effective with the issue of schedules on November 13, November 20, and December 22, 1917, and on January 7, 1918. The prices of all iron and steel products not specifically mentioned in these schedules were to be fixed by the industry in conformity with those already announced.

These price schedules carried with them the following stipulations: First, there shall be no reduction in the current rate of wages; second, the fixed prices shall apply to purchases by the United States and Allied Governments and by the American public; and, third, every effort shall be exerted by the industry to maintain a high level of production.

Cast-steel slugs.—On September 25, 1918, a maximum price of 4½ cents per pound f. o. b. Pittsburgh was announced for cast steel slugs. This price continued until December 31, 1918.

Steel rails.—On December 3, 1918, the price-fixing committee fixed the following prices for steel rails to apply to orders placed by the War and Navy Departments:

Bessemer rails, \$55 per gross ton f. o. b. mill.

Basic rails, \$57 per gross ton f. o. b. mill.

These prices pertained to contracts already made by War and Navy Departments and were not to affect contracts made subsequent to December 3, 1918.

The price schedules below include all original base prices and all changes in base prices as issued by the American Iron and Steel Institute in January, August, and November, 1918. All schedules of differentials, extras, discounts from published lists, classifications, and announcements by the committee on steel and steel products of the Iron and Steel Institute are not here included, but they can be found in the pamphlets issued by the American Iron and Steel Institute in January, August, and November, 1918.

Commodity.	Date or period.	Price fixed.
Iron ore.....		Lower Lake ports.
Mesabi Range, non-Bessemer.....	Sept. 24, 1917	\$5.05 per gross ton.
Do.....	July 1, 1918	\$0.45 per ton additional.
Do.....	Oct. 1, 1918	\$0.25 per ton additional.
		Increases are due to increased freight rates, and are subject to change with further changes in freight rates.
Coke, Connellsville.....	Sept. 24, 1917	\$6 per net ton.
Pig iron:		
No. 2 foundry.....	.....do.....	\$33 per gross ton, f. o. b. furnace.
	Oct. 1, 1918	\$34 per gross ton.
Basic.....	Sept. 24, 1917	\$33 per gross ton, f. o. b. furnace.
	Apr. 1, 1918	\$32 per gross ton, f. o. b. furnace.
	Oct. 1, 1918	\$33 per gross ton.
Standard Bessemer.....	.....do.....	\$32.50 per gross ton.
Changes in basing points.....	.....do.....	
Virginia, Tennessee, and Birmingham districts and the scattering districts south of the Ohio and Potomac Rivers, including furnaces at St. Louis but not those bordering on the Ohio River.	.....do.....	F. o. b. Birmingham.
Eastern district; i. e., from all blast furnaces located east of the Alleghany Mountains and north of the Potomac River.	.....do.....	F. o. b. Pittsburgh.
From all other producing districts or furnaces.	.....do.....	F. o. b. furnace.

Commodity.	Date or period.	Price fixed.
Iron and steel scrap.....		F. o. b. consuming point.
No. 1 heavy melting scrap.....	Nov. 5, 1917	\$30 per gross ton.
Do.....	Apr. 1, 1918	\$29 per gross ton.
No. 1 railroad wrought.....	Nov. 5, 1917	\$35 per gross ton.
Cast-iron borings and machine-shop turnings.....	do.....	\$20 per gross ton.
Iron products:		
Iron bars, base sizes.....	Nov. 13, 1917	\$3.50 per 100 pounds.
Cast-iron water pipe, 6-inch and larger, class B or heavier.....		Per net ton of 2,000 pounds, without penalty.
	Dec. 22, 1917	\$49 } F. o. b. Birmingham.
	Oct. 1, 1918	\$55 } F. o. b. New York.
	Dec. 22, 1917	\$60 } F. o. b. New York.
	June 25, 1918	\$55.35 } F. o. b. New York.
	Oct. 1, 1918	\$62.70 } F. o. b. New York.
	Oct. 1, 1918	\$67.70 } F. o. b. Chicago.
	Dec. 22, 1917	\$54.35 } F. o. b. Chicago.
	June 25, 1918	\$61.80 } F. o. b. Chicago.
	Oct. 1, 1918	\$66.80 } F. o. b. Chicago.
Rolled tie plates.....	Dec. 22, 1917	F. o. b. maker's mill.
Iron.....		\$3.75 per 100 pounds.
Steel (see Steel products).		
Standard railroad spikes.....	Dec. 22, 1917	F. o. b. cars Pittsburgh.
Iron.....		\$4.50 per 100 pounds.
Steel products:		
Blooms, billets, slabs, and sheet bars.....	Oct. 11, 1917	F. o. b. Pittsburgh or Youngstown, Ohio.
Blooms and billets, 4 by 4 inches and larger.....		\$47.50 per gross ton.
Blooms and billets smaller than 4 by 4 inches.....		\$51 per gross ton.
Slabs.....		\$50 per gross ton.
Sheet bars.....		\$51 per gross ton.
Shell bars.....	Oct. 11, 1917	F. o. b. Pittsburgh.
3 to 5 inches.....		\$3.25 per 100 pounds.
Over 5 to 8 inches.....		\$3.50 per 100 pounds.
Over 8 to 10 inches.....		\$3.75 per 100 pounds.
Over 10 inches.....		\$4 per 100 pounds.
Forging steel.....	Nov. 13, 1917	F. o. b. Pittsburgh.
Billets, blooms, and slabs.....		\$60 per gross ton.
Forging ingots (basic or acid open-hearth steel).	Dec. 22, 1917	F. o. b. maker's mill.
Up to and including 36 inches diameter, with carbon not over 0.25, cast in chilled molds.....		\$73 per gross ton.
Steel bars and small shapes (under 3 inches, including shell steel).	Sept. 24, 1917	\$2.90 per 100 pounds f. o. b. maker's mill.
Rail steel bars (rolled from old steel rails)....	Dec. 22, 1917	\$3 per 100 pounds f. o. b. maker's mill.
Steel bands, hoops, and strips.....	May 21, 1918	F. o. b. Pittsburgh.
Bands.....		\$3.50 per 100 pounds.
Hoops.....		Do.
Hot-rolled strip steel.....		Do.
Steel structural shapes.....	Sept. 24, 1917	F. o. b. Pittsburgh or Chicago
3-inch and over.....		\$3 per 100 pounds.
Steel plates.....	Sept. 24, 1917	\$3.25 per 100 pounds f. o. b. Pittsburgh or Chicago.
Light rails (45 pounds per yard and under)...	July 1, 1918	F. o. b. Pittsburgh.
Including 10 per cent lengths, down to and including 24 feet.....	Nov. 20, 1917	F. o. b. maker's mill.
Splice joints complete for light rails.....	Dec. 22, 1917	\$3 per 100 pounds.
8-pound section.....		F. o. b. maker's mill.
Ranging to—		\$0.16 per complete joint.
45-pound angle bars.....		\$1 per complete joint.
Rolled steel angle splice bars.....	Dec. 22, 1917	F. o. b. maker's mill.
Standard sections T rails, 50 pounds per yard and heavier.....		\$3.25 per 100 pounds for 25 gross tons or more.
Rolled tie plates.....	Dec. 22, 1917	F. o. b. maker's mill.
Steel.....		\$3.25 per 100 pounds.
Skelp.....	Oct. 11, 1917	
Grooved skelp.....		\$2.99 per 100 pounds.
Universal skelp.....		\$3.15 per 100 pounds.
Sheared skelp.....		\$3.25 per 100 pounds.
Steel pipe.....	Nov. 5, 1917	
1-inch to 3-inch black.....		Discount of 52 and 5 and 2½ per cent from manufacturers' published standard list.
Boiler tubes.....	Nov. 13, 1917	F. o. b. Pittsburgh.
Special skelp—		
Base sizes.....		\$3.40 per 100 pounds.
Other sizes.....		\$3.55 per 100 pounds.
Seamless steel tubes.....	Nov. 13, 1917	F. o. b. Pittsburgh.
Round billets, base sizes.....		\$3.25 per 100 pounds.
Cold-rolled and cold-drawn steel.....	Nov. 5, 1917	Discount of 17 per cent from list published in pamphlet.
Cold-rolled strip steel.....	Nov. 20, 1917	
1½ inch and wider, 0.100 inch and thicker, hard temper, in coils under 0.20 carbon.....		\$6.50 per 100 pounds.

Commodity.	Date or period.	Price fixed.
Steel products—Continued.		
Hot-rolled trip steel.....	Nov. 20, 1917	F. o. b. Pittsburgh.
Finished.....		\$4.50 per 100 pounds.
Unfinished, for cold rolling.....		\$3.50 per 100 pounds.
Sheets (Bessemer and open-hearth).....	Nov. 5, 1917	F. o. b. Pittsburgh.
No. 28 black sheets.....		\$5 per 100 pounds.
No. 10 blue annealed.....		\$4.25 per 100 pounds.
No. 28 galvanized.....		\$6.25 per 100 pounds.
Tin plate, coke base (Bessemer and open-hearth grades).....	Nov. 5, 1917	\$7.75 per 100-pound base box f. o. b. Pittsburgh.
Standard steel cut nails.....	Dec. 22, 1917	F. o. b. Pittsburgh.
20d to 6d.....		\$4 per 100 pounds.
Cut tacks, brads, shoe finders' goods, etc. (to the jobbing trade).	Nov. 20, 1917	
Net base.....		\$8.80 per 100 pounds.
Steel wood screws.....	Nov. 20, 1917	Discounts from standard list.
Chain.....		F. o. b. Pittsburgh.
$\frac{3}{4}$ -inch common steel-proof coil chain, self-colored or blacked.	Nov. 20, 1917	\$8 per 100 pounds.
1-inch base.....	May 21, 1918	\$7.50 per 100 pounds.
Boat spikes, base sizes.....	Nov. 13, 1917	\$5.25 per 100 pounds f. o. b. Pittsburgh.
Standard railroad spikes.....	Dec. 22, 1917	F. o. b. cars, Pittsburgh.
Steel, $\frac{1}{2}$ by $4\frac{1}{2}$ inches and heavier, 200 kegs or more (200 pounds each).		\$3.90 per 100 pounds.
Less than 200 kegs.....		\$1 per 100 pounds, extra.
Iron (see iron products).		
Standard railroad track bolts.....	Dec. 22, 1917	F. o. b. cars Pittsburgh.
Standard button head, oval neck, $3\frac{1}{2}$ inches and larger, by $\frac{1}{2}$ inch and larger, with United States standard square nuts and rolled threads, 200 kegs or more (200 pounds each).		\$4.90 per 100 pounds.
Less than 200 kegs.....		\$1 per 100 pounds, extra.
Bolts, nuts, and rivets.....		F. o. b. Pittsburgh.
Large rivets.....	{ Nov. 13, 1917	\$4.65, base.
	{ May 21, 1918	\$4.40, base.
Boller.....	{ do.....	\$4.50, base.
Horse and mule shoes.....	July 16, 1918	Per 100 pounds, f. o. b., Pittsburgh.
Extra swaged, extra light, light, medium, heavy, long heel, short heel, city pattern, and snow shoes, also mule shoes No. 2 and larger.		\$5.75.
Calks.....	July 16, 1918	Per 100 pounds f. o. b., Pittsburgh.
Toe—		
Blunt, medium, flat, and square pattern—		
200-ton lots and over.....		\$5.50.
Less than 200 tons to carloads, inclusive.		\$5.75.
Less than carloads.....		\$5.90.
Sharp pattern—		
200-ton lots and over.....		\$6.00.
Less than 200 tons to carloads, inclusive.		\$6.25.
Less than carloads.....		\$6.40.
Heel—		
Blunt and medium pattern—		
200-ton lots and over.....		\$6.00.
Less than 200-tons to carloads, inclusive.		\$6.25.
Less than carloads.....		\$6.40.
Sharp pattern—		
200-ton lots and over.....		\$6.50.
Less than 200 tons to carloads, inclusive.		\$6.75.
Less than carloads.....		\$6.90.
Tool steel.....	Jan. 7, 1918	Mill shipments f. o. b. point of shipment and net without discount.
High speed—		
High speed.....		\$2 per pound.
Tungsten finishing steel.....		\$0.65 per pound.
Carbon—		
Nonshrinkable.....		\$0.35 per pound.
Special.....		\$0.23 per pound.
Extra.....		\$0.18 per pound.
Regular.....		\$0.15 per pound.
		Add 1 cent to each of above prices when shipped from maker's warehouse stocks.
Wire and wire products.....		F. o. b. Pittsburgh.
Wire rods, No. 5 common.....	Oct. 11, 1917	\$57 per gross ton.
Wire, plain.....	Nov. 5, 1917	\$3.25 per 100 pounds.
Wire products—		
Barbed wire, standard two-point and four-point hog and cattle pattern, painted.	.....do.....	\$3.65 per 100 pounds.
Wire nails, 20d to 60d, common.....	Nov. 13, 1917	\$3.50 per 100 pounds.
Wire rope.....	{do.....	Discounts or additions applying to standard list.
	{ Aug. 28, 1918	

LEAD.

The price of lead was never formally fixed, but was regulated by informal agreements between the War Industries Board and the lead producers.

On December 17, 1917, a price of 7.75 cents per pound f. o. b. East St. Louis, to be effective from that date until the end of March, 1918, was agreed upon by the nonferrous metals section of the War Industries Board and the lead producers' committee.

On April 8, 1918, it was agreed with the approval of the price-fixing committee that the price of lead in any month should be the average monthly price f. o. b. East St. Louis, quoted by the Engineering and Mining Journal in that month. Where the price f. o. b. New York was lower than the price at East St. Louis, $7\frac{1}{2}$ cents per 100 pounds was to be deducted from the East St. Louis price.

On June 14, 1918, the lead producers' committee agreed that no pig lead other than Government purchases should be sold at more than $7\frac{1}{2}$ cents per pound f. o. b. East St. Louis. The Engineering and Mining Journal considered no sales as made at a higher figure in computing its monthly average price at East St. Louis. It was further decided regarding this agreement:

1. It should go into effect at once for an indefinite period.
2. Further contracts should be as slated and existing contracts modified to conform to the agreement.
3. Other lead producers should be urged to become parties to the agreement.

The same agreement was extended again in August, 1918, until November 30, 1918, when the agreement expired, and was not renewed.¹

MANGANESE ORES.

The price of manganese was not fixed formally. A schedule of prices adopted by the American Iron and Steel Institute was approved by the ferro alloys division of the War Industries Board. Since manganese was not bought directly by the United States Government, these prices pertained to purchases by producers of steel.

The prices listed below became effective May 29, 1918, and were discontinued on December 31, 1918.

The following schedule gives domestic metallurgical manganese ore prices per unit of metallic manganese per ton of 2,240 pounds for manganese ore produced and shipped from all points in the United States west of South Chicago, Ill. This schedule does not include chemical ores as used for dry batteries, etc. The prices are on the basis of delivery f. o. b. cars South Chicago and are on the basis of all-rail shipments. When shipped to other destination than Chicago the freight rate per gross ton from shipping point to South Chicago, Ill., is to be deducted to give the price f. o. b. shipping point.

Schedule for metallic manganese ore containing when dried at 212° F.—

Per cent.	Per unit.
35 to 35.99, inclusive	\$0. 86
36 to 36.99, inclusive	. 90
37 to 37.99, inclusive	. 94
38 to 38.99, inclusive	. 98
39 to 39.99, inclusive	1. 00
40 to 40.99, inclusive	1. 02
41 to 41.99, inclusive	1. 04
42 to 42.99, inclusive	1. 06
43 to 43.99, inclusive	1. 08
44 to 44.99, inclusive	1. 10

¹ Report of nonferrous metals section to Mr. Baruch.

Schedule for metallic manganese ore containing when dried at 212 F.°—Continued.

Per cent.	Per unit.
45 to 45.99, inclusive	\$1. 12
46 to 46.99, inclusive	1. 14
47 to 47.99, inclusive	1. 16
48 to 48.99, inclusive	1. 18
49 to 49.99, inclusive	1. 20
50 to 50.99, inclusive	1. 22
51 to 51.99, inclusive	1. 24
52 to 52.99, inclusive	1. 26
53 to 53.99, inclusive	1. 28
54 to 54.99, inclusive	1. 30

ADDITIONS TO UNIT PRICES.

For manganese ore produced in the United States and shipped from points in the United States east of South Chicago 15 cents per unit of metallic manganese per ton shall be added to above unit prices.

Above prices are based on ore containing not more than 8 per cent silica and not more than 0.25 per cent phosphorus, and are subject to—

Silica premiums and penalties.—For each 1 per cent of silica under 8 per cent down to and including 5 per cent premium at rate of 50 cents per ton. Below 5 per cent silica, premium at rate of \$1 per ton for each 1 per cent.

For each 1 per cent in excess of 8 per cent and up to and including 15 per cent silica there shall be a penalty of 50 cents per ton; for each 1 per cent in excess of 15 per cent and up to and including 20 per cent silica there shall be a penalty of 75 cents per ton.

For ore containing in excess of 20 per cent silica a limited tonnage can be used, but for each 1 per cent of silica in excess of 20 per cent and up to and including 25 per cent silica there shall be a penalty of \$1 per ton.

Ore containing over 25 per cent silica subject to acceptance or refusal at buyer's option, but if accepted shall be paid for at the above schedule with the penalty of \$1 per ton for each extra unit of silica.

All premiums and penalties figured to fractions.

Phosphorus penalty.—For each 0.01 per cent in excess of 0.25 per cent of phosphorus there shall be a penalty against unit price paid for manganese of one-half cent per unit, figured to fractions.

In view of existing conditions, and for the purpose of stimulating production of domestic manganese ores, there will be no penalty for phosphorus so long as the ore shipped can be used to advantage by the buyer. The buyer reserves the right to penalize excess phosphorus as above by giving 60 days' notice to the shipper.

The above prices to be net to the producer; any expenses, such as salary or commission to buyer's agent, to be paid by the buyer.

Settlements to be based on analysis of ore sample dried at 212° F. The percentage of moisture in ore sample as taken to be deducted from the weight.

On August 17, 1918, the United States Railroad Administration announced the following schedule of freight rates on manganese ore, establishing rates lower than the prevailing rates carried in current tariffs:

MANGANESE ORE, CARLOAD, PER TON OF 2,000 POUNDS.

[Minimum carload weight, 60,000 pounds.]

From stations in—	Group D. ¹	Group 2. ²	Groups B and C. ³	Group A. ⁴
Oregon.....	\$11. 00	\$12. 50	\$12. 50	\$15. 50
Washington.....	11. 00	12. 50	12. 50	13. 50
California.....	11. 00	12. 00	12. 50	13. 50
Montana.....	8. 00	9. 50	9. 50	10. 50
Arizona.....	9. 00	9. 00	10. 50	11. 50
Colorado.....	7. 00	7. 00	8. 50	9. 50
Nevada.....	10. 00	11. 00	11. 50	12. 50
Utah.....	9. 00	10. 00	10. 50	11. 50
New Mexico.....	7. 00	7. 00	8. 50	9. 50

¹ Group D: Chicago, Indiana Harbor, and Erie.
² Group 2: Points in Alabama and Tennessee taking Group C rates.
³ Groups B and C: Youngstown, Pittsburgh, Buffalo, and points in Ohio.
⁴ Group A: Points in seaboard territory, including Goshen, Graham, Reusens, and Roanoke, Va.

NICKEL.

On January 4, 1918, a resolution was adopted by the War Industries Board stating that it was not necessary at that time to fix the price of nickel.¹

On April 2, 1918, however, an agreement was made with the International Nickel Co. to supply the Government requirements for nickel at the following rates:

	Cents per pound.
Electrolytic nickel.....	40
Shot nickel.....	38
Ingot nickel.....	35

These prices were to be effective for the duration of the war and were removed on January 1, 1919.

PLATINUM METALS.

The control over the supply and prices of platinum metals was exercised through a series of requisition orders issued by the Ordnance Department and administered by the chemicals division of the War Industries Board. The first ordnance requisition order, No. 510, issued on February 23, 1918, applied to 14 firms dealing in platinum, including refiners, jewelers, and dental supply firms.

Under date of May 1, 1918, a second requisition of the War Department was issued through the platinum section of the War Industries Board. This superseded the order of February 23, 1918, and was to cover all purchases to July 1, 1918. About 900 dealers were affected by this second order.

After conference with the Secretary of War, the platinum section announced the following prices for Government purchases of platinum metals:

	Per troy ounce.
Platinum.....	\$105
Iridium.....	175
Palladium.....	135

On June 21, 1918, the third of the series of requisitioning orders, covering 1,555 firms, was issued. The order became effective June 30, 1918, and continued so until January 1, 1919. The prices of May 1, 1918, were maintained. In this order the prices of all platinum metals were fixed except when the metal was contained in articles of jewelry where the value of the labor exceeded 20 per cent of the value of the metal.

The control over platinum metals was terminated on December 1, 1918.

QUICKSILVER.

The War Industries Board, in conference with the producers of quicksilver, agreed upon the following prices for Government supplies of quicksilver. The prices were effective from April 18, 1918, to January 1, 1919.

Price. ¹	Place of delivery.	Mine.
\$105 per flask	San Francisco.....	California, Oregon.
\$105 per flask	Marine Island Navy Yard.....	Nevada.
	Marathon, Tex.....	Texas.

¹ On May 20, 1918, the matter of fixing the price of nickel was again considered, but it was deemed inadvisable "because of the present capacity being strained to fulfill contracts maturing with the next two years. It was requested and agreed to by the producers that pending a definite settlement of this subject no contract should be extended or future contracts made without first consulting the price-fixing committee." (P. F. C. Min., Vol. IV, May 20, 1918.)

¹ For deliveries at New York or Brooklyn, 75 cents per flask was added to the prices here given.

SILVER.

The following letter was sent by Secretary McAdoo to Senator Pittman, of Nevada, who introduced a bill into Congress providing for the use of silver lying idle in the Treasury. The bill was approved by Congress on April 23, 1918.

Hon. KEY PITTMAN,
United States Senate.

MY DEAR SENATOR: I have examined the draft of a bill embodying the ideas which have been discussed between us for the utilization of the silver now lying unused in the Treasury of the United States. I venture to recapitulate briefly the purposes to be accomplished by the bill and the reasons which, in my judgment, require its enactment.

The annual production of silver has varied in recent years, having fluctuated from 160,000,000 ounces to 226,000,000 ounces per annum, according to the estimate of the Director of the Mint. Production for the year 1916 amounted to 158,600,000 ounces, and for the year 1917 is estimated to be approximately 160,000,000 ounces. The decline in production during recent years has been partly due to conditions in Mexico, as the result of which Mexican mines have not been operated to their full capacity.

The price of silver has varied from about 48½ cents per fine ounce, at which price it sold during August, 1915, to \$1.18 per fine ounce during September, 1917. Apart from industrial requirements, estimated at about 100,000,000 ounces per annum, silver is used by all nations for subsidiary coinage, and by India and other oriental countries for major coinage. In China uncoined silver circulates as money.

The European War has greatly enlarged the demand for silver. European countries engaged in the conflict have required unusual quantities of silver coins for their armies and for the civil population. Buying power of oriental countries has been greatly enlarged, and as the importation of commodities has been limited owing to war needs of the belligerents, that buying power has been exercised to acquire silver.

China and India are two oriental countries that absorb the largest amounts of silver. The products of India are wheat, jute, burlap, etc. The demand for Indian products has been unusual. Jute bagging is used for sugar, grain, and fertilizer bags; also as outside wrappers for cotton and other products. It is also used for trench bags and for packing many articles of military necessity. No article has been found that will serve as a substitute.

The Orient is willing to accept silver in place of gold for commodities furnished by them, and it is to the interest of the United States and its allies that foreign trade balances should, as far as possible, be settled in silver rather than in gold. The gold in this country and in the hands of its allies is needed as a base for the enormous credit structure it is necessary to erect in the process of placing Government loans, and every ounce of silver that can be used in the settlement of foreign balances is so much gained. It is better to settle trade balances by shipping silver than to make arrangements for stabilizing exchange, where these are possible, as they are not in the Orient, because these exchange arrangements, whatever their form, always mean a deferred demand for gold, while the settlement of foreign balances in silver is a definite settlement calling for no future adjustments. Further, the unprecedented business activity in this country has caused an unusual demand for silver for subsidiary coinage, the needs of the United States for this purpose during the present year being greater than ever before, amounting, as they do, to approximately 21,250,000 ounces.

There are now in the Treasury of the United States approximately 490,000,000 standard silver dollars, containing approximately 375,000,000 ounces of fine silver. Against these standard silver dollars there are outstanding silver certificates, and so long as these silver certificates remain outstanding a corresponding amount of silver dollars must be held for their redemption.

The proposal is now made to borrow from the Treasury for the purposes stated above a portion of the silver so held in the Treasury, but only upon the cancellation from time to time of a corresponding amount of outstanding silver certificates. The silver having been so borrowed and used, the Secretary of the Treasury is required to repurchase from time to time, at the fixed price of \$1 per fine ounce, an amount of silver equal to the silver so borrowed and used, and to recoin the silver into standard silver dollars, thus in time replacing in the Treasury the silver so withdrawn. In this way the large mass of silver,

which is serving no useful active purpose, now can be made available for a direct war purpose. There is no intention of making any permanent change in the status of the silver certificates.

The proposition is, in brief, to retire silver certificates; to borrow from the Treasury the silver for use for the war purposes above set forth; and then, as silver from time to time in the future comes on the market, to replace the silver so borrowed by purchase in the market at the fixed price of \$1 per fine ounce and to replace the borrowed silver by coining the new silver acquired for that purpose into standard silver dollars. There is no limit of time within which this must be done.

The cost of producing silver, like the cost of producing all other commodities, has greatly increased. Labor is receiving very much higher wages than during normal times. Machinery is more expensive, and the chemicals and other supplies needed in the production of silver are all correspondingly higher in price. The price at which the silver is to be rebought has been fixed in the proposed bill at \$1 per ounce. This price was arrived at after an examination by the Director of the Mint into the cost of producing silver in a number of different mines, and the Director of the Mint is of the opinion that \$1 per fine ounce under all the conditions at present prevailing is a fair price. The silver released through the retirement of silver certificates will be sold by the Secretary of the Treasury for the war purposes stated, at a price that will permit him without loss to rebuy at the price of \$1 an ounce the silver thus sold.

The proposed measure is unquestionably in the interest of the country as a whole for the prosecution of the war. It proposes no permanent change in our existing currency arrangements. What is proposed is a temporary change, consisting of the active use for war purposes of the silver now lying inert in the Treasury. The bill provides within itself the steps necessary to reverse that position and to replace and recoin the silver.

The arrangement proposed is purely a temporary arrangement, and the pressing needs of the United States require, in my opinion, its prompt enactment into law.

Sections 5, 6, 7, and 8 seem to me the best way of dealing with the contraction of the circulating medium which would otherwise be brought about through the cancellation of silver certificates. This is accomplished by authorizing an issue of Federal reserve bank notes in small denominations in order to fill the void occasioned by the retirement of silver certificates, and provides for the prompt retirement of those Federal reserve bank notes as silver certificates are from time to time reissued. There may well be differences of opinion as to the best method of counteracting such contraction. If no method of meeting the contraction be provided, the contraction will be automatically relieved through the issue of legal-tender notes in denominations of ones and twos, Federal reserve notes taking the place of the legal tender notes. This would be perhaps the easiest way of meeting the situation were it not for the fact that Federal reserve notes are now secured by gold reserve of over 60 per cent, and the issue of additional Federal reserve notes without a corresponding addition to the gold reserve would reduce the percentage of reserve. Federal reserve bank notes, on the other hand, require a reserve of but 5 per cent, and as there is absolutely no reason why a larger reserve for Federal reserve bank notes should be provided, it seems to me unwise to reduce the percentage of reserve under Federal reserve notes.

My reason for stating that the Federal reserve bank notes, the issue of which is contemplated under the bill, require no greater reserve than 5 per cent is that those notes in small denominations will merely take the place in the pockets of the people of the silver certificates now carried by them, and are thus extremely unlikely to be presented for redemption. If and to the extent that they are presented for redemption, it will be a demonstration that these notes are not needed in the circulation, and the means for their prompt retirement is furnished by the deposit as security for these Federal reserve bank notes of short-time certificates of indebtedness or the one-year conversion notes of the United States. Whenever, therefore, these Federal reserve bank notes are presented for redemption it will only be necessary to let the maturing obligations held against them run off. The popular and well-founded feeling against a bond-secured currency therefore does not apply to the present issue, because (1) the issue is strictly temporary in its nature, (2) the security behind the issue automatically provides for the redemption of the issue; (3) no artificial value is given to any long-time bonds by the circulation privilege and no vested interest is created in the circulation privilege, which, if created, it might prove burdensome for the Government or the banks to abate.

If the method suggested for dealing with the replacement of the silver certificates that may be retired does not commend itself to you as the best manner of meeting the situation, I should be glad to discuss any modifications that may be thought advisable.

Cordially, yours,

W. G. McAdoo.¹

On August 15, 1918, the Treasury Department authorized the following statement:

Under the authority of the act of Congress approved April 23, 1918, silver has been sold by the Secretary of the Treasury at a price which will permit the Treasury from new purchases of a corresponding amount of silver at the price of \$1 per fine ounce to recoin the silver purchased into silver dollars without loss. In order to provide for the various items of expense involved it was found necessary to fix the price for which silver was sold at \$1.01½ per fine ounce, and it was made a condition of sale that the purchaser should not pay a higher price for silver in other markets than in those of the United States.

LIMITS LICENSE FOR EXPORT.

Up to the present time the Federal Reserve Board has freely granted licenses for the export of silver. In order, however, to conserve the use of silver, export licenses for silver will hereafter be granted only for civil or military purposes of importance in connection with the prosecution of the war and only in cases where the exporter certifies that the silver to be exported has been purchased at a price which does not directly or indirectly exceed \$1.01½ per ounce 1,000 fine, at the point where silver is refined in the United States, or at the point of importation in the case of imported silver.

ADDITIONAL REQUIREMENTS.

Applications for licenses to export silver should also state from whom the silver was purchased, the point at which silver was delivered to purchaser, for whose account and by whose order, and for what purpose the silver is to be exported.²

These restrictions were removed by the Federal Reserve Board on May 5, 1919, in the following announcement:

On August 15, 1918, the Federal Reserve Board announced that licenses for the export of silver would thereafter be granted only for civil or military purposes of importance in connection with the prosecution of the war and only in cases where the exporter certified that the silver to be exported had been purchased at a price which did not directly or indirectly exceed \$1.01½ per ounce 1,000 fine at the point where the silver is refined in the case of silver refined in the United States or at the point of importation in the case of imported silver. The occasion which required the above limitations on the export of silver having now passed, the Federal Reserve Board will hereafter, unless a Government necessity should again arise, resume its former policy of granting freely and without condition all applications for the export of silver bullion or of silver coin of foreign mintage.

This change of the policy of granting licenses does not do away with the necessity of filing on application for licenses to export silver bullion or silver coin of foreign mintage. Such applications must as heretofore be filed through the Federal reserve banks of the appropriate district, but such applications will, as stated above, be freely granted by the Federal Reserve Board.

The Secretary of the Treasury does not contemplate any further sales of silver under the Pittman Act, except to the Director of the Mint.³

ZINC.

On the recommendation of the War Industries Board and with the approval of the President the following maximum prices of zinc became effective on

¹ Official Bulletin, Apr. 11, 1918.

² Official Bulletin, Aug. 17, 1919.

³ Commercial and Financial Chronicle, May 10, 1919.

February 13, 1918, were renewed on June 1, 1918, again on September 1, 1918, and remained in effect until January 1, 1919.

Grade A, 12 cents per pound f. o. b. East St. Louis.

Plate, 14 cents per pound.

Sheet,¹ 15 cents per pound.

These prices were subject to the following conditions: (a) Differentials shown on the producers' lists at that time were to be allowed; (b) the fixed prices applied to new business and not to unfilled contracts made prior to February 14, 1918,² and to the following more general provisions:

First, that the producers of grade A zinc will not reduce the wages now being paid; second, they will sell to the Allies, to the public, and to the Government at the same price; third, that they will take the necessary measures, under the direction of the War Industries Board, for the distribution of the grade A zinc to prevent it from falling into the hands of speculators, who might increase the price to the public; and fourth, that they pledge themselves to exert every effort necessary to keep up the production of grade A zinc, so as to insure an adequate supply so long as the war lasts.

¹ Sheet zinc included all gauges of one-eighth inch thickness and less, and plate zinc all other gauges.

² Quoted from letter written on Apr. 23, 1918, by Mr. Pope Yeatman, chief of the non-ferrous metals section of the War Industries Board, to Mr. W. B. Ingalls, editor of the Engineering and Mining Journal.

5. TEXTILES AND FIBERS.

The control over textile and fiber prices, which came somewhat later than over foods, fuels, and metals, was, in the main, begun and carried through by the price-fixing committee. The regulations which were issued by the committee, together with those originating in the War Trade Board, the War Industries Board, and the War Department, are listed below under one or the other of the following heads: Binder twine, burlap, cotton goods, cotton linters, kapok, manila fiber, rags, silk, and wool.

BINDER TWINE.

(Mar. 1, 1918, to 1919 harvest season.)

On March 1, 1918, the Food Administration announced an agreement with the manufacturers of binder twine, fixing the price of binder twine for the 1918 harvest. The following schedule shows the maximum differentials allowed above the cost of sisal to the manufacturers of twine, or 19 cents a pound.

In June, 1918, an arrangement was made for the purchase of 500,000 bundles of sisal for the manufacture of twine for the 1919 harvest, at a price of 16 cents per pound. But no change was made in the twine differentials.

This contract as it stood at the time of the armistice will probably remain in effect during the 1919 harvest season.

STANDARD AND SISAL BINDER TWINE, 500 FEET TO THE POUND, F. O. B. FACTORY.

	Cents per pound.
Carload lots of 20,000 pounds or more.....	4
Lots of 10,000 pounds or more, but less than 20,000 pounds.....	4½
All amounts less than 10,000 pounds.....	4½

Prices for other grades should not exceed the prices of standard and sisal twine by more than the following amounts:

	Cents increase.
550 feet to the pound.....	1½
600 feet to the pound.....	3
650 feet to the pound.....	4½
650 feet to the pound (pure manila).....	6

All of these prices are f. o. b. factory.

The Food Administration considered the increased weight of binder twine over the sisal contained therein and the fact that the manufacturers have on hand sisal purchased at lower prices or twine manufactured from lower-priced sisal.

BURLAP.

(Oct. 4, 1918-Jan. 1, 1919.)

With the following announcement on October 25, 1918, the War Industries Board inaugurated the control over the prices of burlap:

The War Industries Board, through the jute, hemp, and cordage section, announces it has accepted the offer of the burlap importers and bag manufac-

turers to establish the following basis of maximum prices for burlap in carload or larger quantities, effective October 4, 1918:

Per yard, 40 inches 8 ounces, 13.6 cents Pacific coast; 14 cents Atlantic and Gulf ports.

Per yard, 40 inches 10½ ounces, 16 cents Pacific coast; 16½ cents Atlantic and Gulf ports.

Other sizes and weights in equal proportion.

Other points in United States based on freight from Pacific coast.

Quantities less than carload at prices slightly higher to cover cost of handling.

These prices to be effective until about February 1, 1919.

This resolution is voluntarily made by the trade because much lower prices are expected to prevail as the result of purchases to be made after January 1, 1919, through assistance of the War Industries Board, and therefore does not affect the validity or integrity of contracts made prior to October 4, 1918.

In its aim to secure much lower prices for all purchasers of burlap in the United States, the War Industries Board realizes that this voluntary reduction represents very heavy losses to importers and bag manufacturers. That the losses may be the more equitably distributed, it is therefore the duty of each citizen to stand loyally by any contract for burlap made prior to October 4, 1918.

Dealers in second-hand bags and burlap attended a conference with the War Industries Board October 10, and after a full explanation of the situation placed themselves on record as being in accord with the action taken, and pledged their loyal support to the maintenance of maximum prices on the basis of these prices for new burlap and in the usual proportion thereto.

Bag manufacturers established maximum prices on bags f. o. b. factory on the following basis:

Maximum prices on burlap f. o. b. factory, plus cost of manufacturing, plus 5 per cent margin.

At the time of the armistice negotiations were under way for a price on burlap under Government control which show a decline of about 25 per cent from the existing maximum prices.

COTTON GOODS.

(July 1, 1918-Jan. 1, 1919.)

The regulation of the prices of cotton goods was first formally considered in a conference between representatives of the industry and the price-fixing committee on March 26, 1918. No action was then taken.¹

On June 8, 1918, it was agreed that a subcommittee of the price-fixing committee should meet with a committee representing the industry and formulate a definite plan of action.

On June 10 the following announcement was published:

The price-fixing committee of the War Industries Board was in conference Saturday with the executive committee of the war service committee of the National Council of American Cotton Manufacturers. In order to establish a basis for a prospective price agreement to introduce stabilization into the trade and avoid any undue hardship upon the manufacturer and distributor of cotton goods, the following tentative plan was outlined to be operative if the pending negotiations for a price agreement are concluded:

TENTATIVE PLAN OUTLINED.

On all bona fide sales made on or before June 8, 1918, for delivery previous to January 1, 1919, prices to remain as shown in sales. On all sales made after June 8, 1918, for delivery subsequent to September 30, 1918, the prices are to be subject to revision to accord with the prices agreed upon by the price-fixing committee of the War Industries Board in conference with the war service committee of the National Council of American Cotton Manufacturers.

On all sales made for delivery after January 1, 1919, the prices agreed upon by the price-fixing committee in conference with the war-service committee of the National Council of American Cotton Manufacturers are to be the prices,

¹ Price-fixing committee, Minute Book I, Mar. 26, 1918.

regardless of the fact that the sales may have been made previous to June 8, 1918.

It is understood that all prices for so-called spring (1919) business will be subject to such revision.

The plan contemplates that manufacturers' prices on staples shall be on the same basis of cost and profit to the Government and to their usual civilian outlets. It is further expected that manufacturers will agree to devote a uniformly large proportion of their productive capacity to making staples.¹

A few days later supplemental provisions were announced:

The price-fixing committee recognizes the necessity for prompt stabilization, and expects that it will soon fix prices, even in the absence of such cost data as would be desirable; and, accordingly, it announces that its action in this instance is not in accordance with the usual procedure and may not be expected to be the basis for future operations with this industry.

STIPULATION AGREED TO.

As a part of the price program which is planned to be operative within a few days the following stipulation was agreed to, supplementary to the provisions previously agreed to:

All sales made after June 21 and before October 1 will be on the basis of the prices to be approved by the price-fixing committee to apply to sales made before October 1, this regardless of the period during which delivery is to be made.

Prices will later be fixed to apply to sales made during the period October 1 to December 31, 1918, or for such other period as may appear desirable at the time.

The war-service committee submitted prices on a few staple cloths. The prices are materially lower than the present market prices. The committee was instructed to submit on July 1 a schedule of prices on the complete list of staples, as well as prices on cotton yarns, all on a parity with the prices suggested today.²

On July 1, 1918, the price-fixing committee in executive session agreed that, pending the receipt of more definite data, it would be expedient to fix a maximum base price of 60 cents per pound for 36-inch sheeting with differentials for other cotton fabrics.³

The official statement covering this decision was approved July 8, 1918, and is given below:

At a meeting of the price-fixing committee of the War Industries Board with the cotton manufacturers, maximum net prices at mill were agreed upon and approved by the President for the following basic products:

	Cents per pound.
36 inches, 48 by 48, 3-yard sheeting-----	60
36 inches, 56 by 60, 4-yard sheeting-----	70
38½ inches, 64 by 60, 5.35-yard print cloth-----	83
38½ inches, 80 by 80, 4-yard print cloth-----	84

Standard wide and sail duck, 37½ and 5 per cent from list.

Standard Army duck, 83 per cent from list.

These prices represent a reduction from quoted market prices of about 20 to 30 per cent, and apply to all primary civilian purchases as well as to the Government and those Governments associated with us in the war. A committee is at work on a list comprising a full line of staple cotton fabrics for the purpose of establishing prices upon a parity with those herein quoted. It is expected that this list will be published in a few days. These prices are to remain in effect until October 1 of this year, before which date the industry will meet with the price-fixing committee for the purpose of agreeing upon prices for a further period of 90 days. Future agreements will be premised on figures to be collected and analyzed by the Federal Trade Commission designed both to show basis of profit and equity of parities. Present prices were necessarily based upon inadequate information, but in the emergency nature of the case and

¹ Official Bulletin, June 10, 1918.

² Official Bulletin, June 22, 1918.

³ Price-Fixing Committee, Minute Book V, July 1, 1918.

⁴ Later changed to 86 cents.

the advisability of a gradual adjustment are considered fair and equitable by both the manufacturers and the price-fixing committee. Prices named are to cover primary sales made since June 8 for delivery after October 1 and all primary sales made since June 21 regardless of the delivery dates.

The President, in approving these prices, has expressed his appreciation of the spirit with which the cotton manufacturers have met the Government's efforts to stabilize an industry which so directly reaches into the life of every citizen. The President calls upon and expects all manufacturers of ready-to-wear goods as well as all dealers in cotton fabrics to so regulate their profits as to insure to the consumer the full benefit of this large reduction in price.

Lists of differentials from the basic prices were issued from time to time. On September 3, 1918, the price-fixing committee announced its future policy with regard to the fixing of differentials:

In accordance with the agreement between the representatives of the cotton-manufacturing industry and the price-fixing committee, various differentials based on the fundamental prices then agreed on have been established and published. It is believed that enough representative fabrics have been so priced to make it entirely possible and feasible for the industry itself to establish prices on fabrics varying slightly from these representative numbers, such variants to be prices in complete harmony with the spirit of the agreement of July 1, 1918. Such variants may be reviewed and modified by the price-fixing committee if this course of action seems advisable.

The committee conferred with representatives of the industry on September 25, 1918, but owing to the failure of a large number of cotton mills to submit their cost sheets within the period requested, the committee found it necessary to postpone its revision of prices.

With the exception of a few changes in maximum prices, to take effect October 1, 1918, the schedules were extended until November 16, 1918.

The price-fixing committee had hoped to reduce the maximum prices at the next conference, but when they met with the representatives of the industry on November 8 and 9, the trade protested against a reduction, and no new agreement was reached. The committee issued the following statement:

In the absence of agreement on new prices the present maximum limits on cotton goods are left unchanged by the price-fixing committee until January 1, 1919, except for certain revisions hereinafter referred to. In making this arrangement the price-fixing committee took into consideration the special difficulty which arises at the present time in determining fair prices on cotton goods. The price of raw cotton is fluctuating and uncertain. The differentials for the numerous separate classes of cotton goods vary greatly and can not be brought into reasonable conformity with each other except after prolonged investigation. In view of these circumstances the committee finds itself unable to fix new maximum prices at the present time.

In sanctioning the maintenance of the existing schedule for a limited period the committee wishes it to be understood that the prices enumerated in that schedule are not indorsed as just and reasonable, but only as maximum prices, not to be exceeded under any conditions during the period stated. It is not recommended by any implication that these prices must now be paid by the Government, by the Allies, or by the public.

It is agreed on the recommendation of the manufacturers that certain errors in the yarn schedule be corrected and that differentials be investigated, and if any of them are found out of line with basic prices, be revised to more fairly conform to the general profit return on other cotton goods. All sales made after November 16 shall be subject and shall conform to any revisions made under this paragraph.¹

At a meeting of the price-fixing committee on November 14, 1918, the provision in the schedule of August 7, 1918, to the effect that sales in gingham should be made only for delivery prior to April 1, 1919, was canceled.

¹ Official Bulletin, Nov. 16, 1918.

Sales of this commodity as well as of any other cotton commodity may be made for any delivery period agreed on between buyer and seller at prices under no circumstances in advance of the published schedules.¹

On December 12, 1918, differentials were fixed on yarns and twine covering sales made from November 17, 1918, to January 1, 1919.

The fixed prices of cotton goods expired by limitation on January 1, 1919.

The schedules of differentials are attached below. The commodities are arranged alphabetically, and the prices under each commodity are arranged chronologically.

BANDAGE CLOTH.

(Sept. 25, 1918.)

Width (inches).	Yards per pound.	Sley and pick.	Cents per yard.
36	8.77	44 by 40	9½
32	9.87	44 by 40	8½
30	10.52	44 by 40	8½
28	11.28	44 by 40	7½

COTTON BLANKETS.

STAPLE BLANKETS.

(Aug. 16, 1918.)

Made of American cotton with standard binding and packing, maximum price of the equivalent of \$3.07½ per pair net cash at mill, based on size of 64 by 76 inches, weighing about 2½ pounds per pair, finished in gray, white or tan with usual border.

WOOL FINISHED BLANKETS.

(Aug. 16, 1918.)

Made partly of foreign cotton, with standard binding and packing, maximum price the equivalent of \$3.75 per pair, net cash at mill, based on size 66 by 80 inches, weighing about 3½ pounds per pair, finished in gray, white, or tan with usual border.

All other constructions, designs and colors in both the so-called "Staples" and "Wool finish" variety to be based on the above standard prices. Special binding or packing can be priced extra.

JACQUARD BLANKETS.

(Aug. 16, 1918.)

Made partly of foreign cotton and woven on jacquard looms, with standard binding and packing, maximum price the equivalent of \$1.35 per pound net cash at mill. Special binding or packing can be priced extra.

DUGOUT BLANKETS, AMERICAN COTTON, QUARTERMASTER CORPS, NO. 127.

Weight.	Size (inches).	Sley and pick.	Price per blanket.
(Oct. 17, 1918.)			
3½ pounds.....	48 by 84	45 by 55, wool finish.....	\$3.50
3½ pounds.....	48 by 84	American cotton.....	4.55
3½ pounds.....	48 by 84	.....do.....	4.00

¹ Price-Fixing Committee, Minute Book XI, Nov. 15, 1918.

HEAVY CHAMBRAYS, CHEVIOTS, COTTON PLAIDS, AND KINDRED COLORED FABRICS, SEPTEMBER 3, 1918.

Class 1: Lakewood, 25 inches, 6.10 plaids, at 15½ cents, terms 2/10-60 extra, delivery at mill—no freight (which figures net to mill 15.08½ cents).

Class 2: Riverside, 27 inches, 4.60 plaids, at 20½ cents, terms 2/10-60 extra, delivery at mill—no freight (which figures net to mill 19.88½ cents).

Class 3: Pilot junior shirting, 28 inches, 4.30 Chambrays, at 22 cents, terms 2/10-60 extra, delivery at mill—no freight (which figures net to mill 21.34 cents).

Class 4: Massachusetts, 26 inches, 3 suitings, at 29 cents, terms 2/10-60, delivery at mill—no freight (which figures net to mill 28.13 cents).

Class 5: Otis indigo checks, 30 inches, 3.50 checks, at 28 cents, terms 2/10 extra, delivery at mill—no freight (which figures net to mill 27.16 cents).

Class 6: Massachusetts K. F. C., 32 inches, 3.10 shirting, at 31 cents, terms 2/10-60 extra, delivery at mill—no freight (which figures net to mill 30.07 cents).

COUTIL.

(Sept. 25, 1918.)

Division.	Width (inches).	Weight.	Sley and pick.	Cents per yard.	Discount.	Net cash f. o. b.
1918.						
No. 1.....	38	2.73	108 by 56	31½	Less 3 per cent.....	\$0.30665
No. 2.....	38	3.05	100 by 56	29	.....do.....	.2813
No. 3.....	38	2.25	96 by 80	37½	.....do.....	.3601
No. 4.....	38	2.15	96 by 68	36½	.....do.....	.3565
No. 5.....	38	2.15	104 by 80	38½	.....do.....	.3771
No. 6.....	38	1.85	124 by 84	45	.....do.....	.4365
No. 7.....	38	1.70	104 by 80	46½	.....do.....	.4486

DENIMS.

(Sept. 3, 1918.)

Division No. 1: Standard-Otis, No. 8, 2.20 white back denim, indigo. Price suggested, \$0.3750 per yard; terms 2/10-60 days dating, delivery at mill, no freight allowance (which figures net to mill 36.38 cents per yard).

Comprising this division are all white back indigo-blue denims.

Differentials suggested as follows: 9-ounce, 1 cent a pound less than 2.20; 8-ounce, 1 cent a pound less than 2.20; 2.40/2.50, inclusive, 1½ cents a pound more than 2.20; 2.55/2.75, inclusive, 3 cents a pound more than 2.20; 3 and lighter, 4 cents a pound more than 2.20.

Division No. 2: Standard-Everett, 2.45 denim, indigo. Price suggested, 33½ cents per yard; terms 2/10-60 days dating, delivery at mill, no freight allowance (which figures net to mill 32.617 cents per yard).

Comprising this division are all double and twist construction denims.

Division No. 3: Standard-Proximity, No. 31, 2.40 double and twist indigo denim. Price suggested, 33.50 cents per yard; terms 2/10-60 days dating, delivery at mill, no freight allowance (which figures net to the mill 32.50 cents per yard).

Differentials suggested as follows: 2.60/2.65, inclusive, 2 cents a pound more than 2.40; 2.70/2.80, inclusive, 3 cents a pound more than 2.40; 3 and lighter, 4 cents a pound more than 2.40.

Brown denims: Recommendation is that 2 cents per pound more be paid for brown denims than indigo denims in all corresponding weights.

Aniline denims: Recommendation is that price be 2 cents per pound less than indigo denims in all corresponding weights.

GRAY RED STAR DIAPER CLOTH.

(Sept. 25, 1918.)

Width (inches).	Yards per pound.	Cents per pound.	Cents per yard.
19½	6.75	77	11.41
20½	6.00	76	12.67
24½	5.50	75	13.64
26	5.15	75	14.56
29½	4.55	74	16.26
32½	4.15	73	17.59

DRILLS.

Width.	Yards per pound.	Sley and pick.	Price per pound on basis estab- lished.	Price per yard suggested by experts.
<i>Inches.</i>		July 25, 1918.	<i>Cents.</i>	<i>Cents.</i>
30	2.50	72 by 60	60.00	24½
30	2.50	70 by 52	58.73	23½
30	2.50	68 by 48	57.48	23
30	3.25	68 by 40	60.02	18½
37	2.65	68 by 40	61.00	23
37	2.35	68 by 40	58.86	25
36	2.28	66 by 56	60.41	26½
37	3.95	68 by 40	69.29	17½
37	3.75	68 by 40	67.67	18
30	3.00	68 by 40	59.22	19½
30	2.85	71 by 46	59.85	21
3-LEAF WIDE DRILLS.				
40	2.40	68 by 40 July 25, 1918.	60.94	25½
52	1.90	68 by 40	61.79	32½
58	1.60	68 by 40	60.41	37½
59	1.85	58 by 40	63.56	34½
59	1.94	68 by 40	64.59	33½
DRILLS.				
40	3.96	Aug. 7, 1918. 68 by 40	.....	18
37	3.25	Aug. 14, 1918. 68 by 40	.....	20½
37	3.50	68 by 40	.....	19½
29½	2.40	Oct. 25, 1918. 86 by 52	.....	25½
37	2.00	68 by 56	.....	30½
GRAY DRILLS.				
30	2.45	Nov. 8, 1918. 76 by 60	.....	24½
30	2.50	68 by 56	.....	23½
30	3.00	68 by 44	.....	20½
30	4.00	68 by 40	.....	16
30	4.25	84 by 48	.....	16½
30	5.25	60 by 50	.....	13½
33	2.50	72 by 48	.....	24½
34½	2.38	68 by 56	.....	25½
36	2.00	68 by 56	.....	28½
37	2.75	68 by 40	.....	22½
37	3.00	68 by 40	.....	21½
49	1.68	72 by 48	.....	36½
52	1.75	64 by 38	.....	34
52	1.75	68 by 42	.....	34½
54½	1.70	68 by 42	.....	35½
54	1.70	70 by 44	.....	36½
56	1.70	70 by 44	.....	36½
60	1.53	70 by 44	.....	40

DUCKS.

(July 1, 1918.)

Standard wide and sail duck, 37½ per cent and 5 per cent from list.
Standard Army duck, 33 per cent from list.

ENAMELING DUCKS.

Width (inches).	Yards per pound.	Sley pick.	Cents per pound.
51½	1.38	July 25, 1918. 84 by 30	61
38	2.00	84 by 30	62
46½	1.44	84 by 30	61
56½	.....	84 by 30	62
61	.....	84 by 30	63
72	.....	84 by 30	64

FLAT SINGLE FILLING DUCKS.

29	8.00	July 25, 1918. 76 by 28	54
29	8.00	(1)	55

TWISTED FILLING DUCKS.

29	8.00	July 25, 1918. 76 by 28	58
29	8.00	(1)	59

SHELTER TENT DUCK.

36	1.95	Aug. 7, 1918. 62 by 62	39
35	1.84	54 by 56	36½
35	1.94	Aug. 22, 1918. 54 by 56	75
35	1.94	62 by 62	78.9

¹ 84 or over by 28. ² Per yard. ³ Ounces.

(The price as published under Aug. 7, 1918, is in error; quotation of Aug. 22, 1918, is correct.)

REGULAR HOSE AND BELTING DUCK.

(Aug. 7, 1918.)

	Cents per pound.
Ranging from 12 ounces to 36 ounces.....	58
10-ounce hose duck.....	59

(Sept. 26, 1918.)

Hose and belting duck.....	62½
10-ounce hose duck.....	64½

Wide and sail duck, 37½ per cent discount from standard list.
Standard Army duck, 31½ per cent discount from standard list.
Single filling duck, classes A, B, and C.
Double filling duck, classes A, B, and C.
These classifications are described as follows:
Class A: To be duck, made of white cotton, without waste or strips, and counting not under 80 by 28. Also qualities equal to Magnolia and Lindale to be in this class.
Class B: To be duck, of all clean cotton, and counting not under 72 by 28. This class is recognized as the standard grade of single filling duck.
Class C: To be duck, made to count not under 72 by 28, and containing not over 25 per cent of waste or strips.

FLANNELS.

(Sept. 25, 1918.)

MITTEN FLANNELS.

Weight (ounces).	Cents net at mill.	Cents per yard.
3	24.92	25½
6	27.34	28½
7	31.22	32½
8	35.75	36½
10	44.00	46½
9	40.17	41½
11	49.31	50½
12	53.76	55½
13	58.13	59½
14	62.72	64½

CANTON FLANNELS.

Width (inches).	Yards per pound.	Cents net at mill.	Cents per yard.
30	2.75	26.91	27½
28	2.95	25.25	26½
28	4.00	20.00	20½
27	5.00	16.75	17½

Lighter weights up to 7 in general proportion.

FLANNELETTES.

(Sept. 3, 1918.)

Division No. 1 :	Cents per yard.
1921 light stripes, checks, and plaids.....	25.81
1921 dark fancies and grays, North State light stripes, checks, and plaids.....	25.81
North State dark fancies and grays.....	27.81
Swiss light stripes, checks, and plaids.....	25.81
Swiss dark fancies and grays.....	27.81
Division No. 2 :	
Smyrna light stripes, checks, and plaids.....	23.08
Smyrna dark fancies and grays.....	23.08
Saluda light stripes, checks, and plaids.....	23.08
Saluda dark fancies and grays.....	25.08
Division No. 3 :	
Rutherford flannel.....	32.86
Special Government flannel.....	32.86
Division No. 4 :	
Pine.....	23.00
Portage.....	23.00
Division No. 5 : ¹	
Daisy bleached.....	27.75
Daisy colors.....	28.75
Malta bleached.....	27.75
Malta colors.....	28.75
Division No. 6 : ¹	
Cashmere bleached.....	24.11
Cashmere colors.....	25.11
1921 bleached.....	24.11
1921 colors.....	25.11
Division No. 7 : ¹	
Persian bleached.....	21.06
Persian colors.....	22.06
Defender bleached.....	21.06
Defender colors.....	22.06
Division No. 8 : ²	
1,501 bleached.....	33.43
900 bleached.....	33.43

(Maximum price, Aug. 7, 1918.)

	Cents per yard.
Division No. 1: Toile du Nord, Amoskeag A, F, C, Bates seersucker, Glonkirk zephyrs, red seal sephyras.....	23.28
Division No. 3: Amoskeag utility, York dress gingham, red rose Lancaster, apple-web.....	21.34
Division No. 4: Amoskeag 19000, Berwick chambray, Kilburnie gingham, Yomac gingham, white pine chevot, Ennex chambray.....	23.28
Division No. 7: Amoskeag staples, Lancaster staples.....	18.92
(Above prices are all net cash at mill.)	

¹ These prices are based on bleached and light colors only. Differential to be given for darks and special shades.² These prices are based on bleached only. Differential to be given for darks and special shades. Prices are all net to mill, with no freight.

3-LEAF JEANS.

(Aug. 7, 1918.)

Width (inches).	Yards per pound.	Sley and pick.	Cents per yard.
39	2.75	96 by 64	27½
39	3.00	96 by 64	26
39	3.10	96 by 64	25½

GRAY 3-LEAF JEANS.

(Aug. 16, 1918.)

39	3.10	96 by 64	25½
39	3.00	96 by 64	26
39	2.75	96 by 64	27½

When bleached, price of these goods to be increased 1½ per cent.

OSNABURGS.

PART WASTE OSNABURGS.

Weight (inches).	Weight per yard (ounces).	Sley and pick.	Cents per yard.
		(Aug. 14, 1918.)	
30	7.00	39 by 30	22½
30	8.00	39 by 34	25½
29½	3.33	34 by 34	16½
32	1.88	32 by 28	26½
34	1.77	32 by 28	28½
36	3.00	32 by 28	18
36	3.25	32 by 28	16½
36	3.60	32 by 28	15½
36	3.90	32 by 28	14½
40	1.60	32 by 28	31½
40	2.00	32 by 28	25½
40	2.28	32 by 28	22½
40	3.25	32 by 28	17
40	3.50	32 by 28	16
40	3.00	36 by 36	18½

CLEAN OSNABURGS.

36	3.00	(Nov. 8, 1918.) 32 by 28	18½
36	3.25	32 by 28	17
36	3.80	32 by 28	15
40	2.00	38 by 36	27
40	2.28	(Nov. 9, 1918.) 32 by 28	23½

CARDED CLOTHS.

PLAIN CARDED CLOTHS.

39	5.00	(Aug. 16, 1918.) 80 by 88	22
39	6.00	72 by 68	18½
39	6.00	80 by 76	19½
39	5.25	92 by 92	24
39	5.00	96 by 100	25½
39	4.95	96 by 104	26
40	9.00	72 by 60	15½
40	7.70	80 by 72	18½
29	13.33	(Nov. 8, 1918.) 56 by 52	9½
36	9.00	68 by 64	14½
36	9.55	72 by 68	14½
36	5.82	60 by 60	14½
36	6.25	80 by 80	19½
39	8.70	68 by 56	14½
40	8.60	72 by 68	16½
40	6.25	88 by 80	20½
40	6.00	88 by 80	20½
40	9.00	72 by 60	15½

HISTORY OF PRICES DURING THE WAR.

COMBED YARN FABRICS.

Weight (inches).	Weight per yard (ounces).	Sley and pick.	Cents per yard.
		(Sept. 3, 1918.)	
40	10.50	84 by 80	28
30	12.00	76 by 72	16½
28	13.25	68 by 64	13½
34	6.40	64 by 72	21
29	7.50	64 by 72	18
40	9.50	72 by 68	20½
40	9.00	76 by 72	21½
40	8.50	88 by 80	25
40	7.00	96 by 100	29
30	11.35	88 by 80	18½
34	7.00	72 by 100	24
36	21.00	28 by 24	7

PLAIN COMBED CLOTH.

		(Nov. 8, 1918.)	
36	10.25	73 by 56	16½
36	10.00	72 by 60	17½
38	5.90	96 by 125	28½
38½	7.75	96 by 92	27
39	11.00	68 by 56	17½
40	6.50	108 by 112	32½
40	7.25	104 by 100	30½
40	8.75	100 by 96	32½
40	6.00	96 by 100	28½
40	9.35	96 by 92	33½
40	9.00	80 by 80	24½
40	7.25	96 by 92	27½

SPECIAL PONGEE FABRIC.
(Made from 1½-inch cotton.)

		(Sept. 3, 1918.)	
38	4.85	60 by 72	18½

COMBED PONGEE.

		(Nov. 8, 1918.)	
34	5.20	64 by 62	22½
34	5.80	64 by 60	22½
38	5.75	64 by 72	20½

PRINT CLOTHS.

		(July 1, 1918.)	
38½	5.35	64 by 60	1 83
38½	4.00	80 by 80	84
		(Aug. 7, 1918.)	
39	4.00	80 by 80	2 21½
		(Aug. 9, 1918.)	
39	4.75	68 by 72	18
39	4.25	72 by 76	19½
		(Aug. 14, 1918.)	
38½	8.20	44 by 40	10½
38½	6.25	60 by 48	13½
37½	4.70	64 by 68	19½
39	4.50	64 by 88	20
39	4.20	64 by 104	22
39	6.60	56 by 44	12½
40	7.25	52 by 40	11½
44	6.40	48 by 48	13½
44	7.25	44 by 40	11½
25	10.55	56 by 44	8½
27	8.70	56 by 56	9½
27	7.60	64 by 60	11½
31½	7.50	56 by 52	11½
31½	8.70	48 by 48	9½
32	6.20	64 by 60	13½
36	11.30	32 by 28	7½
36	7.75	48 by 44	10½
37½	4.70	64 by 88	19½
36	21.00	20 by 16	4½
36	13.00	32 by 28	6½
36	17.00	24 by 20	5½
38½	5.35	64 by 60	15½

1 Per pound.

2 Correction.

PRINT CLOTHS—Continued.

Width (inches).	Sley and pick.	Price per pound (cents).	Cents per yard.
36	20 by 12	23.25 (34.6 average yarn)	37
36	20 by 14	22.00 (34.8 average yarn)	41
36	26 by 22	15.80 (35.2 average yarn)	54
36	28 by 24	15.00 (36.2 average yarn)	61
36	32 by 24	13.50 (35.1 average yarn)	67
36	32 by 28	12.00 (33.4 average yarn)	77
36	36 by 32	11.50 (36.3 average yarn)	77
36	36 by 32	11.20 (35.4 average yarn)	81
36	36 by 32	10.50 (33.2 average yarn)	81
36	40 by 32	10.20 (34.1 average yarn)	81
36	40 by 36	9.65 (34.1 average yarn)	81
36	44 by 36	9.20 (34.1 average yarn)	91
36	40 by 40	9.20 (34.1 average yarn)	91
36	44 by 40	8.50 (33.2 average yarn)	101
36	44 by 44	8.10 (33.1 average yarn)	101
36	48 by 40	8.10 (33.1 average yarn)	101
36	48 by 44	7.75 (33.1 average yarn)	111
36	44 by 44	8.40 (34.3 average yarn)	101
36½	8 by 8	40.00 (30.1 average yarn)	21
36½	16 by 8	30.00 (33.9 average yarn)	31

Widths (inches).	Sley or pick.	Weight per yard.	Price per pound (cents).	Cents per yard.
	(Aug. 14, 1918.)			
37	40 by 36	9.38	34.1	9
38	48 by 48	7.15	33.7	11½
38	56 by 44	6.75	33.1	12½
38½	44 by 36	8.50	33.8	91
38½	44 by 44	7.65	33.4	101
38½	48 by 48	7.15	34.1	11½
38½	52 by 40	7.30	33.4	11½
38½	60 by 52	6.00	33.4	13½
38½	64 by 55	5.50	32.8	15
38½	64 by 64	5.15	32.8	16½
39	40 by 28	9.80	33.5	81
39	40 by 32	9.20	33.3	9
39	72 by 80	4.50	34.4	19½
40	32 by 28	10.80	33.5	71
40	40 by 32	9.10	33.8	91
40	48 by 48	7.00	34.7	12½
40	56 by 44	6.60	34.1	12½
40	56 by 56	6.00	34.7	14½
40	64 by 64	5.10	33.7	16½
42	32 by 28	10.50	34.2	71
42	44 by 40	7.50	34.1	11½
42	33 by 44	7.00	33.4	11½
43	40 by 32	8.25	33.0	91
43	56 by 48	5.85	33.8	14½
43	56 by 52	5.60	33.6	14½
44	36 by 32	8.50	32.8	91
44	64 by 60	4.65	32.7	17½
44	64 by 64	4.50	32.7	18½
25	40 by 32	14.75	34.3	51
25	40 by 36	14.00	34.3	61
25	40 by 36	13.25	32.5	61
25	44 by 44	10.26	29.1	81
25	58 by 45	11.00	34.1	71
27	44 by 44	9.50	29.1	81
27	56 by 52	9.00	33.9	91
27	56 by 44	9.75	34.0	81
27	64 by 56	7.85	32.8	101
28	40 by 28	13.50	33.1	61
28	64 by 56	7.50	32.5	11½
28	64 by 60	7.30	32.7	11½
29	48 by 48	9.70	34.8	9
31½	56 by 40	8.45	33.0	91
32	32 by 28	13.50	33.5	61
32	48 by 48	8.80	34.9	91
32	48 by 48	8.50	33.7	101
34	44 by 40	9.40	34.6	9
34	48 by 48	8.00	33.7	101
34	64 by 60	6.00	32.7	13½
32	64 by 60	6.50	33.3	13½
28	64 by 64	7.00	32.4	12½
44	(Oct. 17, 1918.) 36 by 32	8.50	32.34	91

HISTORY OF PRICES DURING THE WAR.

SATEENS.

Width (Inches).	Weight per yard.	Sley and pick.	Cents per yard f. o. b. mill.
53-54	1.30	(Aug. 30, 1918.) 104 by 64	53½
		(Oct. 25, 1918.)	
34	3.00	108 by 56	24½
34	2.45	112 by 64	28½
34	3.00	108 by 60	24½
33½	2.15	118 by 76	32½
37½	1.89	124 by 80	37½
33½	2.15	118 by 72	32½
34	3.00	108 by 56	24½
34	3.00	108 by 56	24½

FILLING SATEENS.

		(Sept. 30, 1918.)	
26½	6.85	64 by 72	12½
28	5.85	64 by 88	15½
31	4.00	72 by 120	22½
31½	5.50	64 by 88	16½
35	5.50	64 by 72	16½
35	5.25	64 by 80	17½
35	4.65	64 by 104	20½
35	3.75	64 by 112	23½
36	5.10	64 by 80	17½
36	4.85	64 by 88	18½
36	4.50	64 by 96	20½
37½	5.25	64 by 72	17
37½	5.00	64 by 80	18½
37½	4.25	64 by 96	21½
37½	4.00	64 by 104	22½
37½	4.15	64 by 112	22½
37½	3.90	64 by 112	23½
39	4.75	64 by 80	18½
39	4.00	64 by 104	22½
39	4.00	64 by 112	23½
39	3.75	64 by 112	24½
39	3.80	64 by 124	24½

GN SATEEN.

37	2.25	(Oct. 20, 1918.) 120 by 64	31½
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WARP SATEEN.

		(Sept. 25, 1918.)	
40	3.00	112 by 64	26½
42	3.50	112 by 64	24½
42½	4.00	96 by 56	21½
42½	3.90	96 by 60	22½
42½	3.75	96 by 64	22½
37½	3.65	112 by 64	22½
29	4.20	112 by 64	19½
37	3.50	112 by 64	25½
37½	3.65	112 by 64	22½
30½	4.00	112 by 64	20½
29	4.20	112 by 64	19½
30½	3.35	112 by 64	22½
30½	3.30	118 by 64	23½
30½	3.00	118 by 64	25½
30½	3.35	118 by 64	23½
30½	2.65	118 by 64	27½
27½	3.70	112 by 64	20½
27½	2.50	96 by 56	25½
30	2.85	88 by 38	21½

SATEENS—Continued.

CARDED WARP SATEENS.

Width (inches.)	Weight per yard.	Sley and pick.	Cents per yard f. o. b. mill.
		(Nov. 8, 1918.)	
30½	3.00	114 by 84	27½
42½	2.75	96 by 64	27½
43	3.45	140 by 96	34½
53	1.14	108 by 64	59½
53½	1.22	108 by 64	56½
54	1.30	93 by 60	52½
54	1.05	96 by 64	62½
54	1.05	85 by 64	63½
55	1.08	93 by 60	60½
55	1.18	108 by 64	58½

CARDED FILLING SATEENS.

		(Nov. 8, 1918.)	
38	4.40	80 by 124	28
39	3.75	96 by 132	31½
39	3.20	72 by 120	27½
39	3.50	72 by 120	23
39	3.75	84 by 124	30
39	3.50	96 by 160	35½
39	3.35	96 by 160	36½
43	3.35	72 by 120	29½
43	3.35	84 by 124	33½
43	3.35	96 by 132	37½
43	3.85	64 by 104	24½
43	3.65	64 by 112	25½

COMBER FILLING SATEENS.

		(Nov. 8, 1918.)	
39	3.35	96 by 160	44½
39	4.25	84 by 136	33½
39	3.35	96 by 136	41½

SHEETING.

Width (inches).	Weight per yard.	Sley and pick.	Cents per yard f. o. b. mill.
		(July 1, 1918.)	
36	3.00	48 by 48	1 60
36	4.00	56 by 60	70
		(July 25, 1918.)	
36	2.85	48 by 48	20½
36	3.00	48 by 48	20
36	3.25	48 by 48	18½
36	3.50	40 by 40	17
40	2.85	48 by 48	21½
38, 36	4.00	48 by 52	16½
36	4.00	56 by 60	17½
36	4.50	48 by 52	15½
36	5.00	48 by 48	14½
36	5.50	48 by 44	13½
36	6.00	40 by 40	11½
36	6.15	44 by 40	12
31	5.00	48 by 48	13½
36	4.70	48 by 52	15½
40	5.00	44 by 44	14½
40	4.25	44 by 40	15½
40	3.75	48 by 44	17½
		(Aug. 7, 1918.)	
36	3.00	64 by 68	20
36	3.50	64 by 68	20½
36	3.70	64 by 68	19½
40	3.15	64 by 68	22½
		(Aug. 30, 1918.)	
31	5.00	48 by 48	13½
		(Sept. 3, 1918.)	
40	2.50	48 by 48	23½
40	2.70	48 by 48	22½
40	2.35	48 by 48	25
32	6.25	40 by 40	11½
36	5.00	64 by 64	16
31	4.50	44 by 44	14½
		(Sept. 5, 1918.)	
34	6.00	40 by 40	11½
		(Sept. 25, 1918.)	
40	2.00	40 by 40	27½

GRAY SHEETINGS.

		(Nov. 8, 1918.)	
26	4.35	48 by 48	14½
36	2.95	52 by 56	21
36	3.15	60 by 72	22½
36	3.90	40 by 38	15½
36	4.00	48 by 48	16½
40	2.70	44 by 44	21½
40	3.60	56 by 60	19½
48	2.25	48 by 48	27½
54	2.00	44 by 44	30½
54	2.00	48 by 48	31
64	2.25	60 by 60	32½

1 Cents per pound 2 Net price. 3 Net f. o. b. mill. 4 F. o. b. mill.

WIDE SHEETINGS.

The price is 80 cents per pound net cash f. o. b. mill. This price divided by the weight of the 11/4 brown will give the yardage price of the 11/4 brown and 10/4 bleached; divided by the weight of 10/4 brown will give the yardage price of 10/4 brown and 9/4 bleached, and so on through the various widths.

CARDED OIL CLOTH SHEETING.

Width. (inches.)	Weight per yard.	Sley and pick.	Cents per yard f. o. b. mill.
		(Nov. 4, 1918.)	
51½	4.75	40 by 40	17½
51½	4.50	40 by 40	18½
51½	4.25	40 by 40	19
51½	4.75	44 by 40	18
51½	4.50	44 by 40	18½
51½	4.25	44 by 40	19½
58	4.25	44 by 40	20½
60	4.18	40 by 40	20½
60	3.65	44 by 44	22½

TICKING.

(Sept. 25, 1918.)

Class 1 is intended to cover the various blue and white and fancy twill tickings in the heavier weights, but not to include the so-called "Straw ticks":

32-inch, 8 ounces, 80 by 72, class 1, Cordis A, C. E, 38.558 cents net to mill.

32-inch, 8 ounces, 80 by 70, class 1, A, C, A Amoskeag.

32-inch, 2 ounces, 76 by 68, class 1, A, O, A Eagle and Phoenix.

32-inch, 8 ounces, 88 by 58, class 1, Bowling Brook.

Class 2 is intended to cover the blue and white and fancy twill tickings in the lighter weights, known as "Straw ticks":

30-inch, 3.75 ounces, 73 by 40, class 2, Thorndike C, 20.13 cents.

Class 3 is intended to cover the sateen tickings in all weights:

33-inch, 8 ounces, 100 by 72, class 3, Conestogo, R. & D. and B. & D., 40.4975 cents.

Class 4 is intended to cover the hickory stripes, a fabric closely affiliated with ticking, which it seems best to include:

28½-inch, 2.85 ounces, 72 by 42, class 4, Thorndike E, 8 by 4, hickory stripes, 27.16 cents.

PILLOW TUBING.

(Sept. 25, 1918.)

The yardage price of the bleached cloth is to be found by dividing 85 cents per pound by the yards per pound of the gray cloth from which it is made.

TWILLS.

4-LEAF TWILLS.

Width (inches).	Yards per pound.	Sley or pick.	Cents per pound.	Cents per yard.
		(July 25, 1918.)		
30	2.00	88 by 48	56.84	28½
30	2.15	88 by 48	57.91	27
30	2.31	88 by 48	59.04	25½
30	2.40	88 by 48	59.68	24½
30	2.50	88 by 38	58.71	23½
30	2.65	88 by 38	59.90	22½
30	2.85	88 by 38	61.21	21½
30	3.00	88 by 38	62.20	20½
30	3.25	88 by 38	63.81	19½
59	1.76	76 by 44	62.94	35½
		(Sept. 25, 1918.)		
37	1.75	86 by 44	.....	32½
37	2.00	86 by 44	.....	29½
37	2.10	86 by 44	.....	28½
37	2.35	76 by 42	.....	25½
37	2.35	84 by 42	.....	26½
		(Oct. 25, 1918.)		
29½	2.65	108 by 52	.....	25½
30	2.25	108 by 52	.....	28½
37	1.85	108 by 52	.....	34½
		(Nov. 8, 1918.)		
29	2.00	104 by 54	.....	31
29½	2.15	104 by 48	.....	29½
29½	3.00	84 by 37	.....	20½
29½	2.50	104 by 48	.....	26
29½	2.50	88 by 38	.....	23½
30	2.00	98 by 42	.....	29½
30	2.00	88 by 42	.....	28½
30	2.20	98 by 42	.....	27½
30	2.31	108 by 48	.....	28
30	2.70	80 by 37	.....	21½
30	3.00	98 by 42	.....	22½
36	1.90	88 by 48	.....	31½
37	1.50	76 by 42	.....	37½
37	1.75	76 by 42	.....	32½
37	1.83	104 by 42	.....	34½
37	2.00	76 by 42	.....	29½
39	1.90	76 by 40	.....	31
48	1.54	76 by 42	.....	37½
50	1.48	76 by 42	.....	39½
58	.96	76 by 42	.....	59
58	1.30	76 by 40	.....	45½
58	1.35	68 by 56	.....	45½
59	1.40	48 by 64	.....	43½
59	2.00	88 by 56	.....	37
		(Nov. 9, 1918.)		
29½	2.50	88 by 38	.....	23½
30	3.00	98 by 42	.....	22½
59	1.40	48 by 64	.....	43½

TWILLS—Continued.

3-LEAF TWILLS.

Width (Inches).	Yards per pound.	Sley to pick.	Cents per pound.	Cents per yards.
		(Sept. 5, 1918.)		
37	4.50	96 by 60	.....	19½
36	4.20	60 by 80	.....	19½
38½	3.10	96 by 64	.....	24½
39	5.10	64 by 64	.....	17
39	4.80	64 by 72	.....	18½
39	4.50	68 by 76	.....	19½
39	4.25	68 by 76	.....	19½
39	4.00	68 by 76	.....	20½
43	4.30	68 by 60	.....	19½
43	4.50	68 by 76	.....	20
43	4.00	68 by 76	.....	21½
43	6.00	64 by 48	.....	14½
43	4.75	68 by 52	.....	17½
		(Nov. 8, 1918.)		
30½	3.85	68 by 76	.....	16½
31	3.85	68 by 80	.....	19½
31	4.00	64 by 72	.....	18½
31	4.20	68 by 80	.....	18½
39	3.25	68 by 76	.....	23½
39	5.10	64 by 104	.....	23½
		Nov. 9, 1918.)		
39	5.10	64 by 104	.....	23½

ALBERT TWILLS.

		(Sept. 9, 1918.)		
35	5.50	64 by 72	.....	16½
35	5.10	64 by 80	.....	17½
35	4.40	64 by 80	.....	19½
35	4.85	64 by 88	.....	18½
		(Nov. 8, 1918.)		
35	4.00	64 by 80	.....	19½
35	5.40	64 by 72	.....	16
35	2.72	72 by 120	.....	29½
35	3.00	72 by 120	.....	27½
38½	4.00	64 by 80	.....	20½
40	2.38	72 by 120	.....	33½
43	2.22	70 by 120	.....	35½

TWILLS.

Width (inches).	Yards per pound.	Sley or pick.	Per pound.	Cents per yard.
		(July 25, 1918.)		
30	2.10	88 by 56	60.90	29
		(Oct. 25, 1918.)		
33½	2.60	68 by 86	.....	26

VENETIANS.

(Sept. 3, 1918.)

SINGLE YARN.

41 cents on N-120, 35 inches, 156 by 64, 31.8:
30/1 all combed rov. twist warp.
33/1 all combed filling.
43½ cents on N-261, 35 inches, 156 by 64, 2.85:
30/1 all combed rov. twist warp.
23/1 all combed filling.

44 cents on P-322, 38 inches, 156 by 64, 2.90:
30/1 all combed rov. twist warp.
33/1 all combed filling.
46½ cents on P-324, 38 inches, 156 by 64, 2.63:
30/1 all combed rov. twist warp.
23/1 all combed filling.

VENETIANS—Continued.

SINGLE YARN COMBED VENETIANS.

(Nov. 4, 1918.)

Width (inches).	Yards per pound.	Sley or pick.	Cents per yard.
35	3.10	156 by 64	41½
35	3.00	156 by 64	42½
36	3.00	156 by 64	42½
36	2.77	156 by 64	44½
37	2.80	148 by 64	44½
38	2.66	144 by 64	46½
38	2.75	156 by 64	45½
38	2.85	156 by 64	44½

TWO-PLY WARP COMBED VENETIANS.

(Nov. 4, 1918.)

35	2.85	156 by 64	58
38	2.63	156 by 64	60

TWINE.

WRAPPING TWINE.

(Aug. 14, 1918.)

Prices for No. 1 quality wrapping twine of 8's or coarser yarn:

	Cents per pound.
Any ply wound on cones or tubes, packed in barrels or bales or in cases, in bulk	61
Any ply wound in 8-ounce or heavier balls, packed in barrels or cases, in bulk	61½
Any ply wound in small balls weighing 5 or 6 to the pound, packed in barrels or cases, in bulk	62
Any ply wound in small balls weighing 5 or 6 to the pound, packed in 5-pound or 10-pound cotton-cloth sacks and 100 pounds in a bale	64

Terms.—Prices are f. o. b. cars shipping point, net cash from date of shipment and include cost of selling.

(Dec. 12, 1918.)

[Covering sales made Nov. 17, 1918, to Jan. 1, 1919.]

No changes made, schedule same as above.

SEINE AND SAIL TWINE.

(Sept. 3, 1918.)

For United States standard seine twine in standard skeins, packed in bulk or in 5-pound or 10-pound pads, 100-pound bales, basis No. 15 to 42 medium laid, 62 cents per pound. Differentials on other sizes and lays, as at present established.

Netras.

For winding in 8-ounce or heavier balls, in bulk, 1 cent above price of skeins.
For winding on 1-pound or heavier tubes, in bulk, 1 cent above price of skeins.
For winding in 4-ounce balls, in bulk, 2 cents above price of skeins.
For winding in 2 to 3 ounce balls, in bulk, 4 cents above price of skeins.
For packing tubes or balls in 5-pound or 10-pound muslin sacks, 2 cents above price for bulk packing.
Exact-weight skeins, 4 ounces or heavier, 2 cents above price regular skeins.
For export packing, 1 cent above price regular packing.
For broken packages of lots of less than 100 pounds of a size, 2 cents above price standard packing.
Sail twine, made on Brownell or Haskell-Dawes twistors, 8-ply and up, on cones or tubes or in 8-ounce balls, in bulk, 63 cents per pound.
Four-ounce balls, in bulk, 1 cent per pound above 8-ounce balls.
Balls in 5-pound or 10-pound muslin sacks, 2 cents per pound above bulk packing.
100-pound bales:
Export packing, 1 cent per pound extra.
Broken packages, 2 cents per pound extra.
Hose cord, made of 12's yarn, Brownell or Haskell-Dawes twistors, 64 cents per pound.
Terms.—No allowance for cones or tubes, net cash, f. o. b. mill. Seller to pay cost of selling.

(Dec. 12, 1918.)

[Covering sales made Nov. 17, 1918, to Jan. 1, 1919.]

SEINE TWINE.

For United States standard seine twine in standard skeins, packed in bulk or in 5-pound or 10-pound pads, 100-pound bales, basis No. 15 to 42 medium laid, basis price to be 7 cents per pound, over fixed price 10s single-carded yarn.

Differentials on other sizes and lays—as at present established by leading manufacturers.

Extras.

For winding in 8-ounce or heavier balls, in bulk—1 cent above price of skeins.

For winding in 1-pound or heavier tubes, in bulk—1 cent above price of skeins.

For winding in 4-ounce balls, in bulk—2 cents above price of skeins.

For winding in 2-ounce to 3-ounce balls, in bulk—4 cents above price of skeins.

For packing tubes or balls in 5 pounds or 10 pounds—2 cents above price for bulk packing muslin sacks.

Exact weight skeins, 4 ounces or heavier—2 cents above price of regular skeins.

For export packing—1 cent above price of regular packing.

For broken packages of lots of less than 100 pounds of a size—2 cents above price of standard packing.

SAIL TWINE.

Sail twine, made on Brownell or Haskell-Dawes twistors, 8 ply and up, on cones or tubes or in 8-ounce balls, in bulk—basis price to be 7 cents per pound over fixed price 10s single-carded yarn.

Four-ounce balls, in bulk—1 cent per pound above 8-ounce balls.

Balls in 5-pound and 10-pound muslin sacks, 100-pound bales—2 cents per pound above bulk packing.

Export packing—1 cent per pound extra.

Broken packages—2 cents per pound extra.

Hose cord, made of 12s yarn, Brownell or Haskell-Dawes twistors—64 cents per pound.

Terms.—All sales to be made on net-weight basis, net cash, f. o. b. mill. Seller to pay cost of selling.

YARN PRICES.

(Aug. 14, 1918.)

PRICES FOR CARDED WARP TWIST YARNS, MADE FROM NOT BETTER THAN MIDDLING UPLAND COTTON.

Single yarn.

Count:	(8 and	10	12	13	14	16	18	20	22	23	24	26	28	30	32	34	35	36
	below)																	
Price:	57½	58	59	59½	60	61½	63	64½	66½	67½	68½	70½	72½	74½	77½	80½	82	83½

For above yarns made of strict to good middling cotton an advance in price of 2½ cents per pound is made, making schedule for such yarns as follows:

Count:	(8 and	10	12	13	14	16	18	20	22	23	24	26	28	30	32	34	35	36
	below)																	
Price:	60	60½	61½	62	62½	64	65½	67	69	70	71	73	75	77	80	83	84½	86

For above yarns made of staple cotton of strict to good middling grade, not less than 1½ inches and not over 1½ inches, an advance in price of 4 cents per pound is made over above schedule, making prices for such yarns as follows:

Count:	36	38	40	42	44	46	48	50
Price:	90	92	94	96	98	1.00	1.02	1.04

The basic price is on No. 8 and below:

Over 8 and not over 10 rise of ½ cent per number.

Over 10 and not over 14 rise of ½ cent per number.

Over 14 and not over 20 rise of ½ cent per number.

Over 20 and not over 30 rise of 1 cent per number.

Over 30 and not over 36 rise of 1½ cents per number.

On yarns of staple cotton in counts 36 to 50 the rise is 1 cent per number.

Ply yarns.

On yarns made of not better than middling upland cotton for 2 ply to 7 ply 1 cent per pound has been added to the single yarn prices for twisting counts 8s and below and not over 10; 1½ cents per pound for counts over 10 and not over 14; 2 cents per pound for counts over 14 and not over 20; 2½ cents per pound for counts over 20 and not over 36, making prices as follows:

Count:	(8 and	10	12	13	14	16	18	20	22	23	24	26	28	30	32	34	35	36
	below)																	
Price:	58½	59	60½	61	61½	63½	65	66½	69	70	71	73	75	77	80	83	84½	86

On yarns made of strict to good middling cotton for 2 ply to 7 ply, 1 cent per pound has been added to the single yarn price for counts 8s and below and not over 10; 1½ cents per pound for counts over 10 and not over 14; 2 cents per pound for counts over 14 and not over 20; 2½ cents per pound for counts over 20 and not over 36, making prices as follows:

Count:	(8 and	10	12	13	14	16	18	20	22	23	24	26	28	30	32	34	35	36
	below)																	
Price:	61	61½	63	63½	64	66	67½	69	71½	72½	73½	75½	77½	79½	82½	85½	87	88½

SPECIAL.

For twisting any of above yarns in counts 8s to 12s in plies 8 to 12 ply an advance of 1 cent per pound is made over prices named above for 2 ply to 7 ply and for twisting them 13 ply to 60 ply an advance of 1½ cents per pound is made over prices named for 2 ply to 7 ply.

For Brownell or Haskell-Dawes tube twisted yarn in counts 8 to 12 an advance is made of 4 cents per pound over the price for singles.

On yarns made of strict to good middling staple cotton, not less than 1⅞ inches and not over 1½ inches, for any standard ply there is added to the price of the single yarn 5 cents per pound on No. 10s and an additional one-quarter cent per pound on each number finer than 10s, making the following prices:

Count:	36	38	40	42	44	46	48	50
Price:	1.01½	1.04	1.06½	1.09	1.11½	1.14	1.16½	1.19

Form of delivery.—The prices named above are for commercial skeins, tubes, cones, and section beams of standard put up.

For ball or chain warps 1 cent per pound extra will be added.

For reverse twist 5 cents per pound advance over regular twist will be added.

For cabling up to No. 30 a charge of 6½ cents per pound will be added to the price of single yarn.

Terms.—Prices include the weight of cones or tubes on which yarn is wound and are net cash from date of shipment and are f. o. b. cars shipping point. Prices include cost of selling.

PRICES FOR STANDARD CARDED HOSIERY AND KNITTING YARNS MADE OF WHITE COTTON.

For single yarns.

Count:	(10 and below)	12	14	16	18	20	22	24	26	28	30
Price:	61	62	63	64½	66	67½	69½	71½	73½	75½	77½

For above yarns made of staple cotton, of strict to good middling grade, not less than 1⅞ inches and not over 1½ inches staple the following prices will apply:

Count:	(10 and below)	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
Price:	65	66	67	68½	70	71½	73½	75½	77½	79½	81½	83½	85½	87½	89½	91½

The basic price is on 10s and below:

Over 10 and not over 14, rise of ½ cent per number.

Over 14 and not over 20, rise of ½ cent per number.

Over 20 and not over 40, rise of 1 cent per number.

For ply yarns 5 cents is added to the price for No. 10 single and ½ cent per pound additional per single number up to 40s. This charge for twisting these high-grade yarns is made for the reason that yarns used in the knitting trade require more perfect manufacture than commercial weaving yarns. They require inspection and also an extra process called doubling. These charges are based on actual differential costs of mills making these yarns, making the following schedule for twisted yarns of standard carded hosiery and knitting quality made of white cotton:

Count:	(10 and below)	12	14	16	18	20	22	24	26	28	30
Price:	66	67½	69	71	73	75	77½	80	82½	85	87½

And the following schedule for twisted yarns made of staple cotton of strict to good middling grade not less than 1⅞ inches and not over 1½ inches staple:

Count:	(10 and below)	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
Price:	70	71½	73	75	77	79	81½	84	86½	89	91½	94	96½	99	1.01½	1.04

Form of delivery.—On commercial tubes, cones, cops, or skeins in standard put up.

Terms.—F. o. b. cars shipping point, net cash from date of shipment, 2 per cent allowance to be made for cones. Prices include cost of selling.

BASED ON BASIC PRICE FOR NO. 10 AND BELOW, GRADE STRICT TO GOOD MIDDLING.

Combed cotton single yarns.

Length of staple.—Not over 1⅞ inches:

Count:	(10 and below)	12	14	16	18	20	22	24	26	28	30
Price:	76	77	78	79½	81	82½	84	85½	87½	89½	91½

For over 1⅞ inches and not above 1½ inches, 5 cents additional:

Count:	(10 and below)	12	14	16	18	20	22	24	26	28	30	36	40
Price:	81	82	83	84½	86	87½	89	90½	92½	94½	96½	1.02½	1.06½

For over 1½ inches and not above 1⅞ inches to 1½ inches, 5 cents additional:

Count:	(10 and below)	12	14	16	18	20	22	24	26	28	30
Price:	86	87	88	89½	91	92½	94	95½	97½	99½	1.01½

Count:	36	40	45	50	55	60
Price:	1.07½	1.11½	1.16½	1.21½	1.26½	1.31½

For over $1\frac{1}{4}$ inches and not above $1\frac{1}{4}$ inches to $1\frac{1}{2}$ inches, 10 cents additional:

Count: (10 and 12 14 16 18 20 22 24 26 28

below)

Price: 96 97 98 99½ 1.01 1.02½ 1.04 1.05½ 1.07½ 1.09½

Count: 30 36 40 45 50 55 60 70 80

Price: 1.11½ 1.17½ 1.21½ 1.26½ 1.31½ 1.36½ 1.41½ 1.56½ 1.71½

Basic price No. 10 and below:

Over No. 10 and not over No. 14, $\frac{1}{2}$ cent per number above No. 10.

Over No. 14 and not over No. 24, $\frac{1}{2}$ cent per number above No. 14.

Over No. 24 and not over No. 60, 1 cent per number above No. 24.

Over No. 60 and not over No. 80, $1\frac{1}{2}$ cents per number above No. 60.

Form of delivery.—Hosiery and knitting yarns on commercial tubes, cops, cones or skeins in standard commercial put ups, suitable for the hosiery, underwear, and regular knitting manufacturers.

Warp yarns on commercial tubes, cones, skeins, section beams, or warps.

Such yarns if made of higher twist than standard warp twist, or if put up in other than standard forms for delivery, or if specially made for special work, or specially inspected for removal of imperfections, shall be subject to such additional prices to cover additional costs as may be agreed upon between the buyer and seller.

All figures are based on prices net cash from date of shipment f. o. b. cars shipping point, for yarns delivered at net weight such prices to include the cost of selling.

BASED ON BASIC PRICE FOR NO. 10 AND BELOW, GRADE STRICT TO GOOD MIDDLING.

Combed cotton ply yarns.

For twisting 5 cents has been added to No. 10, and one-quarter cent additional per (single) number up to 80s.

Length of staple.—Not over $1\frac{1}{4}$ inches:

Count: (10 and 12 14 16 18 20 22 24 26 28 30

below)

Price: 81 82½ 84 86 88 90 92 94 96½ 99 1.01½

For over $1\frac{1}{4}$ inches and not above $1\frac{1}{2}$ inches, 5 cents additional:

Count: (10 and 12 14 16 18 20 22 24 26 28 30 36 40 45 50

below)

Price: 86 87½ 89 91 93 95 97 99 1.01½ 1.04 1.06½ 1.14 1.19 1.25½ 1.31½

For over $1\frac{1}{4}$ and not above $1\frac{1}{4}$ inches to $1\frac{1}{2}$ inches, 5 cents additional:

Count: (10 and 12 14 16 18 20 22 24 26 28 30 36 40 45 50 55 60

below)

Price: 91 92½ 94 96 98 1.00 1.02 1.04 1.06½ 1.09 1.11½ 1.19 1.24 1.30½ 1.36½ 1.42½ 1.48

For over $1\frac{1}{2}$ inches and not above $1\frac{1}{4}$ inches to $1\frac{1}{2}$ inches, 10 cents additional:

Count: (10 and 12 14 16 18 20 22 24 26 28

below)

Price: 1.01 1.02½ 1.04 1.06 1.08 1.10 1.12 1.14 1.16½ 1.19

Count: 30 36 40 45 50 55 60 70 80

Price: 1.21½ 1.29 1.34 1.40½ 1.46½ 1.52½ 1.59 1.76½ 1.94

Form of delivery.—Hosiery and knitting yarns on commercial tubes, cones, or skeins in standard commercial put ups.

Warp yarns on commercial tubes, section beams or warps.

All figures are based on prices net cash from date of shipment, f. o. b. cars shipping point for yarns delivered at net weight, such prices to include the cost of selling.

(Dec. 12, 1918.)

Prices for carded warp twist yarns, made from Upland cotton below the grade of strict middling.

Single yarn.

Count: (8 and 10 12 13 14 16 18 20 22 23 24 26 28 30 32 34 35 36

below)

Price: 57½ 58 59 59½ 60 61½ 63 64½ 66½ 67½ 68½ 70½ 72½ 74½ 77½ 80½ 82 83½

The basic price is on No. 8 and below:

Over 8 and not over 10, rise of $\frac{1}{2}$ cent per number.

Over 10 and not over 14, rise of $\frac{1}{2}$ cent per number.

Over 14 and not over 20, rise of $\frac{1}{2}$ cent per number.

Over 20 and not over 30, rise of 1 cent per number.

Over 30 and not over 36, rise of $1\frac{1}{2}$ cents per number.

Ply yarns.

For 2-ply to 7-ply, 1 cent per pound has been added to the single yarn prices for twisting counts 8s and below and not over 10; $1\frac{1}{2}$ cents per pound for counts over 10 and not over 14; 2 cents per pound for counts over 14 and not over 20; $2\frac{1}{2}$ cents per pound for counts over 20 and not over 36, making prices as follows:

Count: (8 and 10 12 13 14 16 18 20 22 23 24 26 28 30 32 34 35 36

below)

Price: 58½ 59 60½ 61 61½ 63½ 65 66½ 69 70 71 73 75 77 80 83 84½ 86

SPECIAL.

For twisting any of the above yarns in counts 8's to 12's in plies 8 to 12 ply, an advance of 1 cent per pound is made over prices named above for 2-ply to 7-ply, and for twisting them 13-ply to 60-ply an advance of $1\frac{1}{2}$ cents per pound is made over prices named for 2-ply to 7-ply.

For Brownell or Haskell-Dawes tube twisted yarn in counts 8 to 12, an advance is made for 4 cents per pound over the price for singles.

Form of delivery.—The prices named above are for commercial skeins, tubes, cones, and section beams of standard put up:

For ball or chain warps 1 cent per pound extra will be added.

For cabling up to No. 30's a charge of $6\frac{1}{2}$ cents per pound will be added to the price of single yarn.

Terms.—Prices include the weight of cones or tubes on which yarn is wound and are net cash from date of shipment, and are f. o. b. cars shipping point. Prices include cost of selling.

Prices for carded warp-twist yarns, made from upland cotton that will grade strict to good middling.

Single yarn.

Count: (8 and below)	10	12	13	14	16	18	20	22	23	24
Price: 59	59 $\frac{1}{2}$	60 $\frac{1}{2}$	61	61 $\frac{1}{2}$	63	64 $\frac{1}{2}$	66	68	69	70
Count: 26	28	30	32	34	35	36				
Price: 72	74	76	79	82	83 $\frac{1}{2}$	85				

The basic price is on No. 8 and below:

Over 8 and not over 10, rise of $\frac{1}{2}$ cent per number.

Over 10 and not over 14, rise of $\frac{1}{2}$ cent per number.

Over 14 and not over 20, rise of $\frac{3}{4}$ cent per number.

Over 20 and not over 30, rise of 1 cent per number.

Over 30 and not over 36, rise of $1\frac{1}{2}$ cents per number.

Ply yarns.

For 2-ply to 7-ply, 1 cent per pound has been added to the single yarn prices for twisting counts 8's and below and not over 10; $1\frac{1}{2}$ cents per pound for counts over 10 and not over 14; 2 cents per pound for counts over 14 and not over 20; $2\frac{1}{2}$ cents per pound for counts over 20 and not over 36, making prices as follows:

Count: (8 and below)	10	12	13	14	16	18	20	22	23	24
Price: 60	60 $\frac{1}{2}$	62	62 $\frac{1}{2}$	63	65	66 $\frac{1}{2}$	68	70 $\frac{1}{2}$	71 $\frac{1}{2}$	72 $\frac{1}{2}$
Count: 26	28	30	32	34	35	36				
Price: 74 $\frac{1}{2}$	76 $\frac{1}{2}$	78 $\frac{1}{2}$	81 $\frac{1}{2}$	84 $\frac{1}{2}$	86	87 $\frac{1}{2}$				

SPECIAL.

For twisting any of above yarns in counts 8's to 12's, in plies 8 to 12 ply, an advance of 1 cent per pound is made over prices named above for 2-ply to 7-ply, and for twisting them 13-ply to 60-ply an advance of $1\frac{1}{2}$ cents per pound is made over prices named for 2-ply to 7-ply.

For Brownell or Haskell-Dawes tube twisted yarn in counts 8 to 12, an advance is made of 4 cents per pound over the price for singles.

Form of delivery.—The prices named above are for commercial skeins, tubes, cones, and section beams of standard put up.

For ball or chain warps, 1 cent per pound extra will be added.

For cabling up to No. 30 a charge of $6\frac{1}{2}$ cents per pound will be added to the price of single yarn.

Terms.—Prices include the weight of cones or tubes on which yarn is wound and are net cash from date of shipment, and are f. o. b. cars shipping point. Prices include cost of selling.

Prices for standard carded hosiery and knitting yarns, made of white upland cotton.

Single yarn.

Count: 10 and below	12	14	16	18	20	22	24	26	28	30
Price: 61	62	63	64 $\frac{1}{2}$	66	67 $\frac{1}{2}$	69 $\frac{1}{2}$	71 $\frac{1}{2}$	73 $\frac{1}{2}$	75 $\frac{1}{2}$	77 $\frac{1}{2}$

The basic price is on 10s and below:

Over 10 and not over 14, rise of $\frac{1}{2}$ cent per number.

Over 14 and not over 20, rise of $\frac{3}{4}$ cent per number.

Over 20 and not over 40, rise of 1 cent per number.

For ply yarns 5 cents is added to the price for No. 10s single and $\frac{1}{2}$ cent per pound additional per single number up to 40s. This charge for twisting these high-grade yarns is made for the reason that yarns used in the knitting trade require more perfect manufacture than commercial weaving yarns. They require inspection and also an extra process called doubling. These charges are based on actual differential costs of mills making these yarns, making the following schedule for twisted yarns of standard carded hosiery and knitting quality made of white cotton:

Count: 10 and below	12	14	16	18	20	22	24	26	28	30
Price: 66	67 $\frac{1}{2}$	69	71	73	75	77 $\frac{1}{2}$	80	82 $\frac{1}{2}$	85	87 $\frac{1}{2}$

Form of delivery.—On commercial tubes, cones, cops, or skeins in standard put up.

Terms.—F. o. b. cars shipping point, net cash from date of shipment for yarns delivered at net weight. Prices include cost of selling.

Prices for carded hosiery and knitting yarns, made of staple cotton of strict to good middling grade not less than $1\frac{1}{8}$ inches and not over $1\frac{1}{2}$ inches staple.

Single yarn.

Count: (10 and below)	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	
Price:	65	66	67	68½	70	71½	73½	75½	77½	79½	81½	83½	85½	87½	89½	91½

The basic price is on 10s and below:

Over 10 and not over 14, rise of ½ cent per number.

Over 14 and not over 20, rise of ½ cent per number.

Over 20 and not over 40, rise of 1 cent per number.

For ply yarns 5 cents is added to the price for No. 10s single and ½ cent per pound additional per single number up to 40s. This charge for twisting these high-grade yarns is made for the reason that yarns used in the knitting trade require more perfect manufacture than commercial weaving yarns. They require inspection and also an extra process called doubling. These charges are based on actual differential costs of mills making these yarns, making the following schedule for twisted yarns made of staple cotton of strict to good middling grade, not less than 1½ inches and not over 1½ inches staple.

Count: (10 and below)	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	
Price:	70	71½	73	75	77	79	81½	84	86½	89	91½	94	96½	99	1.01½	1.04

Form of delivery.—On commercial tubes, cones, cops or skeins in standard put up.

Terms.—F. o. b. cars shipping point, net cash from date of shipment for yarns delivered at net weight. Prices include cost of selling.

Prices for comber cotton single yarns based on basic price for No. 10 and below grade strict to good middling.

Length of staple not over 1½ inches.

Length of staple not over 1 1/4 inches.											
Count: (10 and below)	12	14	16	18	20	22	24	26	28	30	
Price:	76	77	78	79 1/2	81	82 1/2	84	85 1/2	87 1/2	89 1/2	91 1/2

Five cents additional for over 1½ and not above 1½ inches.

Five cents additional for over 1 lb. and not above 1 lb. excess.													
Count: (10 and below)	12	14	16	18	20	22	24	26	28	30	36	40	
Price:	81	82	83	84½	86	87½	89	90½	92½	94½	96½	1.02½	1.06½

Five cents additional for over 1½ and not above 1½ to 1½ inches:

FIVE CENTS ADDITIONAL FOR OVER 1 $\frac{1}{4}$ AND NOT ABOVE 1 $\frac{3}{4}$ TO 1 $\frac{1}{2}$ INCHES.																	
Count: (10 and below)	12	14	16	18	20	22	24	26	28	30	36	40	45	50	55	60	
Price:	86	87	88	89 $\frac{1}{2}$	91	92 $\frac{1}{2}$	94	95 $\frac{1}{2}$	97 $\frac{1}{2}$	99 $\frac{1}{2}$	1.01 $\frac{1}{2}$	1.07 $\frac{1}{2}$	1.11 $\frac{1}{2}$	1.16 $\frac{1}{2}$	1.21 $\frac{1}{2}$	1.26 $\frac{1}{2}$	1.31 $\frac{1}{2}$

Ten cents additional for over 1½ and not above 1½ to 1½ inches:

Full Cane Sugar, No. 1, and No. 2, 1 1/2 inches.											
Count: (10 and below)	12	14	16	18	20	22	24	26	28	30	
Price:	96	97	98	99 1/2	1.01	1.02 1/2	1.04	1.05 1/2	1.07 1/2	1.09 1/2	1.11 1/2
Count: 36	40	45	50	55	60	70	80				
Price:	1.17 1/2	1.21 1/2	1.26 1/2	1.31 1/2	1.36 1/2	1.41 1/2	1.56 1/2	1.71 1/2			

Basic price is on No. 10 and below:

Over No. 10 and not over No. 14, ½ cent per number above No. 10.

Over No. 14 and not over No. 24, ½ cent per number above No. 14.

Over No. 24 and not over No. 60, 1 cent per number above No. 24.

Over No. 60 and not over No. 80, 1½ cents per number above No. 60.

Form of delivery.—Hosiery and knitting yarns on commercial tubes, cops, cones, or skeins in standard commercial put ups, suitable for the hosiery, underwear, and regular knitting manufacturers.

Warp yarns on commercial tubes, cones, skeins, section beams, or warps.

Such yarns, if made of higher twist than standard warp twist, or if put up in other than standard forms for delivery, or if specially made for special work, or specially inspected for removal of imperfections, shall be subject to such additional prices to cover additional cost, as may be agreed upon between the buyer and seller.

All figures are based on prices net cash from date of shipment f. o. b. cars shipping point for yarns delivered at net weight, such prices to include the cost of selling.

Prices for combed cotton ply yarns based on basic price for No. 10 and below. Grade: Strict to good middling.

(For twisting, 5 cents has been added to No. 10 and one-quarter cent additional per (single) number up to 80s.)

Length of staple, not over 1½ inches:

Length of staple, not over 1 1/4 inches.											
Count: (10 and below)	12	14	16	18	20	22	24	26	28	30	
Price:	82	82 1/2	84	86	88	90	92	94	96 1/2	99	101 1/2

Five cents additional for over 1½ and not above 1½ inches:

Count: (10 and below)	12	14	16	18	20	22	24	26	28	30	36	40	45	50	
Price:	86	87½	89	91	93	95	97	99	101½	104	106½	114	119	125½	131½

Five cents additional for over 1½ and not above 1½ to 1½ inches:

Five cents additional for over 1 $\frac{1}{4}$ and not above 1 $\frac{3}{4}$ to 1 $\frac{1}{2}$ inches.																
Count: (10 and below)	12	14	16	18	20	22	24	26	28	30	36	40	45	50	55	60

Ten cents additional for over 1½ and not above 1½ to 1½ inches:

Per Cents additional for over 1 1/2 and not above 1 1/2 to 1 3/4 inch										
Count: (10 and below)	12	14	16	18	20	22	24	26		
Price:	101	102 1/2	104	106	108	110	112	114	116 1/2	
Count: 28	30	36	40	45	50	55	60	70	80	
Price:	119	121 1/2	129	134	140 1/2	146 1/2	152 1/2	159	176 1/2	194

Form of delivery.—Hosiery and knitting yarns on commercial tubes, cones, or skeins in standard commercial put-ups.

Warp yarns on commercial tubes, section beams or warps.

All figures are based on prices net cash from date of shipment f. o. b. cars shipping point for yarns delivered at net weight, such prices to include the cost of selling.

COTTON LINTERS.

On May 2, 1918, the price-fixing committee of the War Industries Board established the price for Government purchase of cotton linters of munition grade at \$4.67 per hundred pounds f. o. b. points of production. All prices were made operative from May 2, 1918, to August 1, 1919.

On July 8, 1918, acting upon the recommendation of the chief of the cotton linters section of the War Industries Board, the price-fixing committee fixed the maximum fee for the bleaching of cotton linters at \$6.33 per hundredweight. This price, subject to revision October 31, 1918, was discontinued at that time.

On July 10 the War Industries Board announced the following policy and regulations concerning cotton linters:

It having been deemed necessary for the Government to take over all the cotton linters now in existence, irrespective of grade or ownership, arrangements have now been made for the purchase of mattress or high-grade linters which were produced prior to May 2, 1918, at the actual value of the commodity.

Through the cooperation of the United States Bureau of Markets and cotton and cotton-products section of the War Industries Board, three samples of linters have been selected, representing types of linters on which prices have been suggested which are considered fair and equitable, both to owners of the linters and the Government.

The Du Pont American Industries Co., of Wilmington, Del., as the purchasing agency for the Ordnance Department, is authorized to buy the linters, as follows:

Type of linters designated:	Suggested price per pound.
"A" grade-----cents	\$0.10
"B" grade-----do	.07
"C" grade-----do	.05½

All prices to be f. o. b. points of location.

It is suggested that by agreement between the inspector acting for the purchasing agency of the Ordnance Department, and the owners of the linters, purchases can be made on the basis above suggested, but it must be understood that the prices named are not obligatory, or by authority of the War Industries Board, but are, in the opinion of the representatives of the United States Bureau of Markets and the cotton and cotton products section of the War Industries Board, acting as a committee, fair and just prices that should be paid for these three selected grades.

In the event agreement can not be reached between the inspector and the owner, then the Ordnance Department may exercise its right to commandeer, which process gives the owners opportunity to establish the actual value of their commodity in each instance.

All linters below the grade represented by type "C" shall be considered munition linters, and the price of \$4.67 per hundred pounds f. o. b. points of production, established as of May 2, 1918, by the price-fixing committee of the War Industries Board, shall apply.

There shall be only one grade (munition type) of linters manufactured during the 1918-19 season, and all purchases will be made by the procurement division of the United States Ordnance Department.

RULES GOVERNING THE MANUFACTURE OF COTTON LINTERS.

Rule 1.—All linters cut after May 2, 1918, to be of munition type, running 145 pounds and upward per ton of cotton seed crushed. They may be offered and sold only through the Du Pont American Industries Co., acting as purchasing agents for the procurement division of the United States Ordnance Department.

Rule 2.—Linters shall be produced by one reginning of cotton seed. Such linters must be reasonably free of motes, flues, hull linters, hull fiber, hull

particles, sweepings, seed, meats, lubricating oil, excess moisture, and all foreign matter, and the price of \$4.67 per hundred pounds, fixed by the War Industries Board, as of May 2, 1918, shall apply thereto.

Rule 3.—Linters contaminated by any of the above-mentioned foreign materials, or linters made from spoiled, burned, or badly damaged seed or which have been otherwise damaged, will be accepted by the Government's authorized buying agency at a reduced price. If the producer and the buying agency can not agree upon a price, an agreed sample, approved by both the producer and the buying agency, may be submitted to the procurement division of the United States Ordnance Department for a decision as to price. Such decision shall be final.

Rule 4.—The making of two cuts of linters or passing the seed through linting machines a second time is prohibited.

Rule 5.—Motes, flues, and sweepings: All motes, flues, and sweepings must be offered for sale to the Government buying agency, and if of acceptable grade will be purchased. If not acceptable, mills may then apply to the cotton and cotton products section of the War Industries Board for permit to sell on the open market such rejected motes, flues, and sweepings in limited specified quantities.

Rule 6.—All offerings of motes, flues, and sweepings must be in not less than carload lots.

Rule 7.—All raw cellulose produced by oil mills, whether linters, motes, flues, sweepings, hull fiber, or other fibrous by-products of the cotton seed, shall be offered for sale to the Government buying agency.

Rule 8.—The average weight of bales on any one shipment shall not be less than 450 pounds nor more than 550 pounds. Tare shall not exceed 7 per cent. For contract purposes it shall require 500 pounds gross weight to constitute one bale. All bales must be covered sufficiently and properly to protect the contents.

Rule 9.—Beginning August 1, 1918, all manufacturers of cotton linters will be required to furnish semimonthly reports as of the last working day prior to the first and fifteenth of each month; these reports to be mailed within three days after the end of each semimonthly period. Reports will deal with raw material and finished linters along the lines laid down in the reports required by the United States Food Administration.

These rules harmonize with Army specifications.

The lifting of control.—The Government was practically under the obligation to purchase the supply of linters until August 1, 1919. Immediately after the signing of the armistice, however, restrictions for the manufacture and sale of mattress linters were removed.

The Ordnance Department made an arrangement with the producers of linters, whereby it has agreed to purchase linters to the amount of 150,000 bales at prices of 10, 8, and 5½ cents in the event that this amount is left in the hands of the manufacturers on August 1, 1919.

RATES FOR COMPRESSING COTTON.

On November 5, 1918, the price-fixing committee announced an agreement which it had made with the cotton-compress companies at the request of the Railroad Administration. This agreement was made effective November 4, 1918, to expire July 31, 1919. The compensation agreed upon was 15 cents per 100 pounds to load 75 bales per 36-foot standard car, to apply to all points where cotton is compressed.¹

KAPOK.

(June 18, 1918—Jan. 17, 1919.)

On June 18, 1918, the War Trade Board announced that the importations of kapok would be restricted to purchases for Government use, and that import licenses would be issued through the textile alliance.² No agreement was made

¹ Price-Fixing Committee Minute Book X, Nov. 4, 1918.

² War Trade Board Ruling, 133.

as to price. The restrictions of the War Trade Board were lifted on January 17, 1919.

On August 20, 1918, the Bureau of Supplies and Accounts of the Navy notified all dealers in kapoc that restraining orders were to be issued, and no more sales of kapoc were to be made to the public. These orders became effective on September 20, 1918. Navy orders were then placed until about November 19, 1918, when all orders were released.² A provisional price which averaged about 25 cents per pound was first made, but the final price paid to dealers averaged slightly over 30 cents per pound, some contracts being at lower prices and some at higher. Dealers were paid on the basis of the cost to them of the kapok taken by the Navy.

MANILA FIBER.

(Mar. 25, 1918–Aug. 31, 1918.)

On April 8, 1918, the War Trade Board announced that all purchases of Philippine manila fiber must be made under a schedule of fixed prices for the various grades. In practice there were two schedules: Schedule A was the minimum price to producers in the Philippines on shipments to the United States or elsewhere; schedule B was the maximum price on the same grades in New York. Both schedules were to continue in force for four months, beginning March 25, 1918; but schedule B became ineffective about June 20, 1918.

On July 25, 1918, the price-fixing committee established a maximum price of 14 cents f. o. b. Manila for grade I current hemp. The prices of other grades were fixed soon after. The Government agreed to pay a price for manila rope based upon this maximum price fixed for hemp. This schedule lasted until August 31, 1918, after which no price control was exercised.

SCHEDULE A.

HEMP OR MANILA FIBER.

Grade A, \$30.75 per picul in Manila, equal to 22.36 cents per pound.
 Grade B, \$29.75 per picul in Manila, equal to 21.63 cents per pound.
 Grade C, \$28.87½ per picul in Manila, equal to 21 cents per pound.
 Grade D, \$28.12½ per picul in Manila, equal to 20.45 cents per pound.
 Grade E, \$26.87½ per picul in Manila, equal to 19.54 cents per pound.
 Grade F, \$25.62½ per picul in Manila, equal to 18.63 cents per pound.
 Grade I, \$23.37½ per picul in Manila, equal to 17 cents per pound.
 Grade J, \$19.62½ per picul in Manila, equal to 14.27 cents per pound.
 Grade S1, \$25.62½ per picul in Manila, equal to 18.63 cents per pound.
 Grade S2, \$23.50 per picul in Manila, equal to 17.09 cents per pound.
 Grade S3, \$20.62½ per picul in Manila, equal to 15 cents per pound.
 Grade G, \$20.12½ per picul in Manila, equal to 14.63 cents per pound.
 Grade H, \$18.87½ per picul in Manila, equal to 13.72 cents per pound.
 Grade K, \$14.50 per picul in Manila, equal to 10.54 cents per pound.
 Grade L, \$13.50 per picul in Manila, equal to 9.81 cents per pound.
 Grade M, \$9.75 per picul in Manila, equal to 7.09 cents per pound.
 Grade DL, \$6.12½ per picul in Manila, equal to 4.45 cents per pound.
 Grade DM, \$4.25 per picul in Manila, equal to 3.09 cents per pound.

CEBU MAGUEY.

Grade 1, \$12.75 per picul in Manila, equal to 9.27 cents per pound.
 Grade 2, \$11.50 per picul in Manila, equal to 8.36 cents per pound.
 Grade 3, \$9 per picul in Manila, equal to 6.54 cents per pound.

MANILA MAGUEY.

Grade 1, \$12.25 per picul in Manila, equal to 8.91 cents per pound.
 Grade 2, \$10.25 per picul in Manila, equal to 7.45 cents per pound.
 Grade 3, \$8.50 per picul in Manila, equal to 6.18 cents per pound.

¹ War Trade Board Ruling, 523.

² In releasing orders for kapok, the Navy no longer requisitioned supplies and manufacturers were allowed to sell their stocks on the open market.

SCHEDULE B.

HEMP OR MANILA FIBER.

	Cents per pound.
A	32½
B	31½
C	30½
D, 25 per cent over good current	30½
D, good current	30
E, 75 per cent over fair current	29½
E, 62½ per cent over fair current	29½
E, 50 per cent over fair current	29
F, 37½ per cent over fair current	28½
F, 25 per cent over fair current	28
I, 12½ per cent over fair current	26½
I, fair current	26
J, 50 per cent over superior seconds	23½
S1	28
S2	26½
S3	24
G, soft superior seconds	24
G, soft good seconds	23½
H, soft reds	22½
K	19
L	18
M	15
DL	12
DM	10

CEBU MAGUEY.

Grade 1	17½
Grade 2	16
Grade 3	14½

MANILA MAGUEY.

Grade 1	17
Grade 2	15½
Grade 3	14

MANILA CONTROL PRICES.

Grades.	Prices in cents per pounds fixed Mar. 25, 1918, in Manila.	Prices in pesos Mar. 25, 1918, in Manila.	Prices in pesos July 26, 1918, in Manila.
A	22.36	61.50	51.250
B	21.63	59.50	49.625
C	21.00	57.75	48.125
D	20.45	56.25	46.875
E	19.54	53.75	44.750
F	18.63	51.25	42.750
G	14.63	40.25	33.800
H	13.72	37.75	31.500
I	17.00	46.75	38.500
S1	18.63	51.25	42.750
S2	17.09	47.00	39.125
S3	15.00	41.50	34.625
J	14.27	39.25	34.000
K	10.54	29.00	28.500
L	9.81	27.00	27.000
M	7.09	19.50	19.500
DL	4.45	12.25	12.250
DM	3.09	8.50	8.500

The above are all first-cost prices per picul in pesos.

RAGS.

(Aug. 19, 1918-Dec. 7, 1918.)

Maximum prices for rags were established by the price-fixing committee on different grades of rags, under three dates in August, 1918. Each schedule was to remain in effect until October 1, 1918, and thereafter, pending the compilation and submission of cost data, by the Federal Trade Commission. These fixed

prices were net f. o. b. shipping point and were to apply to sales made both to the Government and to the public.

In October, 1918, new prices, lower than those in force at that time, were established, but publication was withheld and the prices were never announced.¹

VARIOUS GRADES OF RAGS.

(Aug. 19, 1918.)

Grade.	Cents per pound.	Grade.	Cents per pound.
Mixed softs-----	21½	Rough cloth-----	8½
Blue serge-----	25	Skirted cloth, ripped from rough cloth--	11½
Brown serge-----	32	Skirted cloth, sorted from mixed rags--	10
Green serge-----	32	Light skirted cloth-----	15½
Red serge-----	28	Black and white skirted cloth-----	17
Black serge-----	22	Fine light skirted cloth-----	18½
White softs-----	52	Brown skirted cloth-----	10
White flannels and serges-----	50	Dark skirted cloth-----	8½
White knits-----	56	Black skirted cloth-----	10
Red knits-----	27½	Blue skirted cloth-----	10
Blue knits, mixed-----	26½	Tan skirted cloth-----	25
Silver gray knits-----	45	Light skirted worsted-----	25
Brown knits-----	32	Blue skirted worsted-----	21
Fancy knits-----	21	Black skirted worsted-----	22
Black dressed knits-----	30	Brown skirted worsted-----	23
Light hoods-----	38	Dark skirted worsted-----	17
Light gray underwear-----	16	Wool carpets-----	10½
Fine light merinos-----	32	Soft-back carpets-----	4½
Fine dark merinos-----	25	Mixed linseys-----	4½
Coarse dark merinos with serges-----	16	White linsey flannels-----	7
Coarse light merinos with serges-----	24	Wool bodies-----	8½
Thibets-----	28½	Skirted delaines-----	6½

CLIPS

(Aug. 21, 1918.)

The following prices were to be paid by the rag collector to the cutter-up. They were based on high standard of grading and not to be paid for inferior packing:

MEN'S WEAR.

	Cents per pound.
Men's black and blue worsteds-----	48
Fine clothing-house clips, light weight-----	39
Fine merchant tailor clips-----	38
Medium clothing-house clips, light weight-----	37
Ordinary clothing-house clips, including cotton warps-----	32
All-wool overcoating-----	23
Medium overcoatings free from cotton warps-----	20
All-wool mackinaws-----	17
Mixed overcoatings, including cotton warps-----	10
Cotton-warp clothing clips-----	5
All-wool flannels-----	25

WOMEN'S WEAR.

Fine cloak and suit house, light weight mixed clips including serges-----	33
Fine cloak and suit house, light weight mixed clips without serges-----	25
All-wool mixed serges-----	40
All-wool cloakings-----	20
Cotton warp serges-----	8
Cotton warp cloak and suit clips-----	5

¹All fixed prices were discontinued after Dec. 7, 1918. The appended schedules of prices were issued by the price-fixing committee.

NEW WOOLEN CLIPS.

Grade.	Cents per pound.	Grade.	Cents per pound.
Black worsted	65	Blue serge	50
Blue worsted	62	Brown serge	50
Blue-worsted edges	50	Green serge	50
Brown worsted	57	Red serge	50
Black and white worsted	56	Tan serge	60
Light worsted	54	Black and blue serge edges	35
Fine light worsted and clips	50	Dark serge	35
Fine lights	45	Light serge	45
Fine dark worsted	48	White serge	70
Fine dark worsted and clips	47	Blue chevlot	28
Fine mixed clips	44	Red chevlot	28
Mixed dark clips	40	Brown chevlot	28
Mixed clips	35	Green chevlot	28
Medium mixed clips	32	Black chevlot	28
Heavy-weight clips	28	Light blue chevlot	28
Coarse dark clips	28	Tan chevlot	35
Coarse light clips	25	Light homespun	35
Ordinary light clips	20	Medium homespun	30
Black and white	30	Ordinary homespun	25
Dark gray oxford	26	Light flannel	35
Plain black clips	26	Blue flannel	35
Blue uniform clips (without edges)	38	Red flannel	35
Fancy mackinaw	20	Green flannel	36
Union	8	French flannel	27
Light union	11	Mixed flannel	25
Light blue serge	52	Black flannel	33
Black serge	50		

Reworked wool or fiber.

(Aug. 23, 1918.)

These prices include carbonizing, picking, and carding. If dyeing is added, the charges must not exceed 5 cents for black or olive drab (khaki) without special permit from the fiber administrator:

Grade.	Cents per pound.	Grade	Cents per pound.
Blue serge	48½	Coarse light merinos with serges	50
Brown serge	58	Thibets	50½
Green serge	58	Light skirted cloth	39
Red serge	55	Black and white skirted cloth	42
Black serge	44½	Fine light skirted cloth	44½
White softs	86	Brown skirted cloth	29
White flannels and serges	83	Dark skirted cloth	27
White knits	92	Black skirted cloth	29
Red knits	59	Blue skirted cloth	29
Blue knits, mixed	57	Tan skirted cloth	48
Silver gray knits	93	Light skirted worsteds	48½
Brown knits	66	Blue skirted worsteds	43
Fancy knits	48½	Black skirted worsteds	44½
Black dressed knits	63	Brown skirted worsteds	46
Light hoods	76	Dark skirted worsteds	39
Light gray underwear	50	Wool carpets	30
Fine light merinos	58½	Soft black carpets	33½
Fine dark merinos	48	Skirted delaines	36
Coarse dark merinos with serges	38		

SILK.

(Sept. 19, 1918—Dec. 20, 1918.)

The War Trade Board, on September 3, 1918, voted to revoke all outstanding licenses for the importation of silk noils, silk-noil yarns, garnetted silk, and silk waste. This action was effective for shipments after September 10, 1918.¹

Importers were required to give an option on all new licenses to the United States Government. The United States Government was permitted to purchase these restricted commodities at a price 2 per cent above the cost at the foreign port of shipment, as shown by the consular invoice, including all charges except prepaid freight and prepaid insurance. These provisions were administered by the Silk Association of America.

The ruling of the War Trade Board granting this option to the Government was rescinded on December 20, 1918.²

¹ War Trade Board ruling, 237.² War Trade Board ruling, 434.

WOOL.

(Dec. 15, 1917-Jan. 1, 1919.)¹

The formal price fixing of wool began on May 1, 1918. The regulations pertaining to wool prices fall under one or another of the following heads and are so arranged in this compilation: Government regulations for the importation of wool, issued by the War Trade Board; Government regulations for handling the 1918 clip, issued by the War Industries Board; Government wool prices effective May 1, 1918; Government issue prices to manufacturers holding Government contracts.

Disposal of Government stocks.—On December 9, 1918, the Director of Purchase and Storage of the War Department made the following plan for disposing of the Government supplies of wool. Limited amounts of wool were to be sold from time to time at public auction. A minimum reserve price was established, below which no bids were considered. The first auction was held on December 18, 19, and 20, 1918. Prices offered by bidders dropped at each auction, and on January 24, 1919, the following announcement appeared:

The War Department authorizes the following statement from the office of the Director of Purchase, Storage and Traffic:

Many inquiries have been received from wool dealers, wool growers, and wool manufacturers in regard to the policy of the Government in disposing of the stocks of wool held by the War Department. In answer to these inquiries, the War Department states as follows:

First. It is the intention of the War Department to continue to sell at public auction such wools as manufacturers may require, with a minimum reserve price the equivalent of the British civil-issue price. This basis of the British civil-issue price will be maintained as the minimum reserve price until July 1, 1919.

Second. It is not the intention of the War Department, in the sale of wool now owned by the Government, to compete with the domestic producers of wool. It is the intention of the War Department, on July 1, 1919, when the domestic clip will probably be arriving in the markets in sufficient volume to supply the wants of manufacturers, to discontinue offering at auction or otherwise until such a time as the domestic producer shall have had ample opportunity to market his 1919 clip, November 1, 1919, those grades of wool that would compete with the product of domestic wool growers remaining in the hands of the Government.

Removal of import restrictions.—Ruling No. 426, bureau of imports of the War Trade Board, issued on January 8, 1919, is given below:

Wool, wool tops, noils, yarns, and waste.—On and after January 10, 1919, licenses may be issued where the applications therefor are otherwise in order for the importation of wool, wool tops, noils, yarns, or waste from any non-enemy country.

Such licenses will contain the provision requiring indorsement of the bill of lading to the Textile Alliance (Inc.).

The Textile Alliance (Inc.) will no longer require the giving of an option to the Government to purchase the commodities imported.

Hereafter it will be unnecessary to refer to any applications for the importation of these commodities to the office of the Quartermaster General.

Under the foregoing rules, licenses may now be issued to importers other than the Quartermaster General for these commodities from the Argentine, Uruguay, and South Africa. Ruling No. 208, issued July 12, 1918, is hereby revoked.

By a further ruling effective April 29, 1919, the importation of wool under a general import license was permitted from all countries except Germany, Luxemburg, Hungary, and those parts of Russia under Bolshevik control.

¹ There were no Government purchases of the 1919 clip, but all stocks of wool on hand at the time of the armistice were disposed of by the War Department.

² Federal Trade Information Service, Jan. 25, 1919.

REGULATIONS FOR THE IMPORTATION OF WOOL.

(Announcement, Dec. 15, 1917.)

The War Trade Board announces that the following regulations will apply as of December 15, 1917, to the importation of wool from all foreign sources:

"1. Applicants for import licenses will be required to sign an agreement containing the following provisions:

"A. The applicant agrees that he will not sell the wool covered by Application No. ----, or any other wool of either foreign or domestic origin, to any person other than a manufacturer without the consent of the War Trade Board; and that, in the event of a sale to a person other than a manufacturer with such consent, he will exact from his purchaser a similar agreement.

"B. The United States Government shall have, and it is hereby granted, an option to purchase, at the price and on the terms hereinafter set forth, all or any part of the wool covered by Application No. ----, for 10 days after custom-house entry thereof; and thereafter on such portion thereof as shall be at any time unsold until the whole amount thereof has been sold by the importer. In the event of the exercise of such option, the basis of price to be paid for the wool shall be equivalent to 5 per cent less than the basis of price of July 30, 1917, for similar wool, as established by the valuation committee of the Boston Wool Trade Association, the actual price of each lot to be determined by a committee to be appointed jointly by the Boston Wool Trade Association and the United States Government.

"2. These regulations shall not apply to any wool purchased abroad on or before December 15, 1917."

Applicants for import licenses will therefore file with their first application copies of all their contracts outstanding on December 15, 1917, for the importation of wool from foreign sources, and as to which all wool contracted for had not been entered at any United States port of entry December 15, 1917, and showing in detail the amount of wool already shipped and the amount of wool yet to be shipped thereunder.

The War Trade Board in fixing the effective date of the foregoing regulations as of December 15, 1917, had as its object the avoidance of any retroactive effect which would be burdensome and embarrassing, and earnestly appeals to wool importers and to manufacturers of woollen products so to conduct their transactions with respect to the stock of wool now on hand and the importations now en route that further speculation, hoarding, and the continuation of fictitious prices may be avoided.

It is hoped that the effect of these regulations will be to clarify the situation and remove the causes for anxiety which have occasioned the abnormal and illogical inflation of prices for that commodity.

The price of wool has advanced in the United States by a percentage greatly in excess of such price advances in other countries. The price in England is fixed at 55 per cent in excess of prewar prices. The price in the United States has advanced 200 per cent above the prewar level. It is true that the demand for wool and products thereof has increased as a result of the military needs of the United States, but the demand in other countries has been relatively as great. Those countries, however, have introduced a system of governmental control, and this has prevented the abnormal inflation which the absence of such control invites when the regular course of commerce is disturbed by war.

Governmental control in other countries has allayed the sense of uncertainty as regards the future, which in this country has become almost hysterical and has occasioned speculation between importers. Cloth manufacturers have been impelled by fear to carry abnormal stocks of wool and to contract with dealers or importers for unusual quantities for far forward delivery. Manufacturers of clothing have also been infected by a like dread, inciting the purchase of cloth exceeding in volume their reasonable needs. Such processes have brought about an artificial demand, far in excess of actual consumption, the inevitable effect of which has created a fictitious price condition. This has happened at a time when the wool supply in the country is known to be ample for present needs and for a sufficient period in advance to remove any reasonable apprehension as to the ultimate available supply.

Statistical data collected by the Government, corroborated by independent investigations of the wool industry, clearly indicate that no wool shortage exists, either in the world's supply or in the amount on hand in the United States, notwithstanding the increased consumption for military purposes. The

clip in most countries has steadily increased since the outbreak of the war, because sheep raisers, stimulated by the higher returns for wool, have permitted the flocks to increase, and it may be reasonably expected that this increased production will continue.

The consumption of wool during the year 1918 will be little, if any, greater than it was during the year 1917, for the reason that textile manufacturers have been producing well up to the limit of their reasonable capacity, and, further, because of the increased use of substitutes for wool in manufacturing processes.

The Commercial Economy Board has begun to exert its influence in applying the principle of conservation to the consumption of wool, and will continue to induce the curtailment of its use for less essential products; that is to say, the consumption of wool will be directed into needful and withheld from unnecessary channels. This action as a matter of course will tend to diminish the consumption and further to maintain the present safe margin of supply.

The War Trade Board has invited and confidently awaits the cooperation of the wool dealers and the cloth and clothing manufacturers of the country in causing the abandonment of the practice of far forward purchasing and the unnecessary accumulation of stocks, which practice a mistaken estimate of the wool supply of the country and of the world has incited them to follow. Such hoarding is evidently dangerous, because of the resultant price inflation. The continuance of this practice will threaten the holders of abnormal stocks or those who are committed for far forward deliveries with a severe loss when the inevitable period of readjustment in commodity values is at hand.

It is hoped that the action of the War Trade Board in providing that the Government of the United States may take advantage of the option contained in all import licenses issued on and after December 15, 1917, to purchase importations of wool at a price 5 per cent below that of the Boston market as of July 30 last, will stabilize the market, encourage the importations of wool to continue in the accustomed manner, check the price movement toward the breaking point, and permit of an orderly recession toward a less dangerous level. The bringing about of these conditions through the cooperation of the trade at large with the War Trade Board will enable the various interests concerned so to adjust their operations as to avoid what might otherwise lead to a serious catastrophe.

The procedure of the War Trade Board in this, as in all other regulations instituted by it, necessarily is designed to attain greater national efficiency through the distribution of imported commodities, but the board is likewise desirous of accomplishing this result with the least disturbance to the legitimate course of industry, understanding that the harmonious coordination of all the energies of the Nation is the best guaranty for the successful termination of the war.

More rigid regulations became effective January 14, 1918:

The War Trade Board, after due consideration, has decided to supersede its regulations of December 15, 1917, affecting the importation of wool and dealings in foreign and domestic wool and to promulgate in their place and stead certain other regulations effective as of January 14, 1918. Pursuant to such decision, the War Trade Board hereby withdraws the said regulations of December 15, 1917, and in their place and stead promulgates the following regulations, effective on and after January 14, 1918:

First. All importers of wool will sign, before the delivery or release of any imported wool to them, an agreement or guaranty containing among other things provisions in substantially the following form:

That the United States Government shall have, and is hereby granted, an option to purchase at the price and on the terms hereinafter set forth all or any part of the wool covered by this guaranty for ten (10) days after custom-house entry thereof; and thereafter to purchase such portion thereof as shall be at any time unsold by the importer until the whole amount thereof has been sold. In the event of the exercise of such option the basis price to be paid for the wool shall be equivalent to five (5) per cent less than the basis of price of July 30, 1917, for similar wool, as established by the valuation committee of the Boston Wool Trade Association, the actual price of each lot to be determined by a committee appointed jointly by the wool trade and the United States Government. This option shall not apply to any wool purchased abroad before December 15, 1917.

That the importer will neither export any merchandise in class A or class B of domestic or foreign origin, as hereinafter described, nor transfer ownership or control thereof to or for the benefit of any person or persons outside the United States without first obtaining an export license from or the consent of the War Trade Board.

That the importer will not sell to any person or persons in the United States any merchandise in class A of domestic or foreign origin, as hereinafter described, without first obtaining the purchaser's agreement, in form satisfactory to the War Trade Board, and the consent thereon of the War Trade Board, which consent is to be applied for through the Textile Alliance (Inc.).

That the importer will not sell or deliver to any person or persons in the United States any merchandise in class B of domestic or foreign origin, as hereinafter described, without rendering to the purchaser at or prior to the time the merchandise is shipped or delivered a written invoice thereof containing the following conditions to be fulfilled by such purchaser:

That the purchaser will neither export such merchandise nor transfer ownership or control thereof to or for the benefit of any person or persons outside the United States without first obtaining an export license from or the consent of the War Trade Board.

That the purchaser will report through the Textile Alliance (Inc.) to the War Trade Board at the end of each month all sales of such merchandise.

That the purchaser will not resell such merchandise to purchasers in the United States excepting under the same conditions.

Description of class A and class B merchandise:

Class A: Wool; animal hair suitable for spinning or weaving; tops of wool or of animal hair; woaled skins; skins of sheep or of goats or of lambs or of kids bearing hair suitable for spinning or weaving.

Class B: Nolls of wool or of animal hair; yarn of wool or of animal hair; waste of wool or of animal hair; animal hair unsuitable for spinning or weaving; woollen rags; jute wrappings or coverings when received as wrappings or coverings of merchandise listed in class A or class B above.

Second: Purchasers of class A merchandise from importers will sign an agreement or guaranty containing, among other things, all of the provisions above set forth, with the exception of the provision giving an option of purchase to the United States Government.

New rulings were announced in the War Trade Board Journal for August, 1918:

The supply of wool in the United States has been gradually decreasing owing to the enormous demands for military requirements and because of the shortage in ocean tonnage for transporting wool to this country, and it is evident there will not be sufficient wool to take care of both civilian and military needs unless some comprehensive plan is adopted for purchasing and importing the necessary supply.

It is apparent that under the present system of private transactions in wool it is difficult to insure the utilization thereof in the best interests of the country, and likewise difficult for individuals to secure the necessary tonnage because of lack of assurance to the Shipping Board that the wools imported will be used for the national interests.

The War Trade Board on July 12, 1918, after consultation with the War Industries Board and the War Department, therefore adopted the following ruling:

1. All outstanding licenses for the importation of wool from Uruguay, Argentina, and South Africa are revoked as to ocean shipments made from abroad after July 28, 1918.

2. Hereafter no licenses for the importation of wool from the countries above referred to for shipment from abroad after July 28, 1918, will be issued for the remainder of the present calendar year, except to the Quartermaster General of the United States Army. (W. T. B. R. 166.)

GOVERNMENT REGULATIONS FOR HANDLING WOOL CLIP OF 1918.

The War Industries Board has fixed the prices of the 1918 clip of wool, as established by valuation committees and approved by the Government, as those established on July 30, 1917, at Atlantic seaboard markets. These values are figured on scoured basis.

RIGHTS OF THE GOVERNMENT.

The Government shall have a prior right to acquire all of the 1918 wool clip, or any portion thereof which it may require, at the prices fixed by the War Industries Board. The remainder will be subject to allocation for civilian purposes under the direction of the War Industries Board.

A very large portion of the wool-manufacturing machinery working on Government contracts is located close to the Atlantic seaboard, and in order to avoid the possibility of railroad delay and congestion late in the season, when the crops are moving, it is desirable and necessary that the wool clip shall be collected as soon as possible at points near to the manufacturing centers. For these reasons it has been considered advisable to designate as distributing centers those centers which are close to points of consumption and which have the necessary facilities for handling wool.

NECESSITY FOR CONCENTRATION.

The necessities of the Government at this time are such as to require the use of all existing agencies for concentrating the wool near the centers of consumption. Therefore all the wool of the 1918 clip must be distributed through approved dealers in approved centers of distribution.

APPROVED DEALERS DEFINED.

Approved dealers shall be those dealers authorized by the War Industries Board to handle wool who are located in the distributing centers and who buy from growers direct, through agents, or from country merchants; and also those dealers authorized by the War Industries Board who are located in wool-growing districts, and who buy direct from growers and resell, or consign to the dealers in distributing centers.

Approved distributing centers are the usual well-recognized points of distribution.

CLASSES OF WOOL.

In a general way, the clip may be divided into fleece wool and territory wool.

Fleece wool shall be considered as that which is grown in the States east of the Mississippi River, and also the States of Minnesota, Iowa, Missouri, Arkansas, and Louisiana, and also those parts of Kansas, Nebraska, North Dakota, and South Dakota, and other localities where the same general conditions prevail. All wool not listed as fleece wool shall be considered territory wool.

In order that the collection of the clip may proceed in a rapid and orderly manner, the following regulations are promulgated by the Wool Division of the War Industries Board:

FLEECE WOOL REGULATIONS.

COMPENSATION OF GROWER AND DEALER.

Approved dealers shall be entitled to a gross profit in no case to exceed 1½ cents per pound on the total season's business, this profit to cover all expenses from grower to loading wool on board cars.

The grower shall receive fair prices for his wool based on the Atlantic seaboard price as established on July 30, 1917, less the profit to the dealer, as stated above, and less freight to seaboard, moisture shrinkage, and interest.

In no case shall this be construed to mean that there shall be more than 1½ cents gross profits made from time wool leaves growers' hands until it arrives at the distributing center.

On consignments forwarded to distributing centers the prices to be paid for the wool to the approved dealers therein shall be those established by the valuation committee on Atlantic seaboard values of July 30, 1917, to which shall be added a commission of 4 per cent to be paid by the Government, if bought by the Government, or by the manufacturer to whom the wool is allotted for other than Government purposes. This commission is to include grading and other expenses of handling. The consignor shall be charged with the freight on his shipment and interest on all advances made for his account to the date of the arrival of his wool at a distributing center, as shown by the railroad receipt.

On any lot remaining unsold in his possession for a longer period than six months the dealer shall be entitled to charge storage and insurance at the market rate, and this additional charge shall be added to the price of the wool.

POOLING BY GROWERS IS ADVISED.

Growers who desire to do so will be allowed to pool their clips in quantities of not less than minimum carloads of 16,000 pounds and consign the wools so pooled as one account to any approved dealer in any approved distributing center. Growers are urged to adopt this latter course through county agents or others, thus eliminating the profits of one middle man.

GOVERNMENT PRICE.

Approved dealers in approved distributing centers will be required to open and grade all their purchases or consignments as rapidly as possible after the arrival of wool at point of distribution. Prices on all wools, as soon as graded, will be fixed by a Government valuation committee appointed for that purpose in the different distributing centers. Prices to be paid by the Government at distributing centers for such wool as it may require are to be those established as of July 30, 1917, at the Atlantic seaboard markets. In addition to said prices the Government is to pay a further sum equal to 4 per cent of the selling prices to cover compensation or commission to approved dealers for their services in collecting and distributing wool. On wool not taken by the Government for its own use and which may be allocated for other uses, prices will also be fixed in accordance with July 30, 1917, values at Atlantic seaboard markets, and on such wool approved dealers shall be entitled to a commission or compensation of a sum equal to 4 per cent of the selling price, and this commission or compensation shall be a charge against said wool and shall be collected from the manufacturer to whom said wool is allocated.

PROFITEERING PROHIBITED.

As a guard against profiteering, the books of all approved dealers in distributing centers shall be at all times open to Government inspection, and if it be found that their gross profits, including the aforesaid commission of 4 per cent, are in excess of 5 per cent on the season's business, then such profits shall be disposed of as the Government decides.

The books of the country dealers shall likewise be open to Government inspection. If it be found that their gross profit for the season's business is in excess of 1½ cents per pound, then such excess profits shall be disposed of as the Government may decide.

DISTRIBUTING CENTERS.

The approved distributing centers for fleece wools are:

Boston, Mass.	Chicago, Ill.	Louisville, Ky.
New York, N. Y.	St. Louis, Mo.	Baltimore, Md.
Philadelphia, Pa.	Detroit, Mich.	Wheeling, W. Va.

TERRITORY WOOL REGULATIONS.

EXCEPTIONS.

In the Willamette Valley, Oreg., and the Puget Sound district of the State of Washington, the regulations in regard to fleece wools shall apply.

DISTRIBUTING CENTERS.

For the reasons before stated, in order that the 1918 wool clip may be promptly concentrated near the manufacturing centers and to make use of every available agency for storing and grading, all Territory Wools must be consigned to one of the designated distributing centers which are as follows:

Portland, Oreg.	New York, N. Y.	Boston, Mass.
Chicago, Ill.	St. Louis, Mo.	Philadelphia, Pa.

The only exception is that clips of under 1,000 pounds may be sold by the owner. In buying these small clips, the buyer must recognize that he is entitled to only a small profit, which must not exceed 2 cents per pound. Growers, if they desire for any reason to consign their wool through their banker, country merchants, or others, may do so and said bank, country merchant, or others, may receive a commission or compensation for handling said growers' wool (in no case to exceed one-half cent per pound); such commission or compensation to be paid by grower. Growers are, however, urged to consign their own wool and get the full price.

SHIPPING.

As soon as possible after wool reaches the railroad the owner should load it and consign it to any approved dealer he may select in one of the designated distributing centers, who will there deliver the wool to the Government or to some manufacturer to whom the Government may allot the wool. These approved dealers will store, insure, handle, and deliver the wool under Government regulation. The grower should procure two copies of the shipping invoice and of the railroad bill of lading, and forward the original invoice and bill of lading to the dealer whom he has selected to handle his wool, retaining the duplicate in his own possession.

ADVANCES, INTEREST, AND FREIGHT.

The grower shall be entitled to receive an advance up to but not exceeding 75 per cent of the fair estimated market value of his wool. He shall pay interest on this advance at the rate of 6 per cent per annum from the date he receives such advance until his wool arrives at the distributing center, as shown by the railroad receipt. It is not intended that the grower shall pay interest on advances after the date of arrival, as shown by the railroad receipt, and he shall be entitled to receive interest on the selling value of his wool after freight has been deducted from date of arrival. The Government is fixing the price of the 1918 clip on a basis delivered at Atlantic seaboard points. It is therefore incumbent on the grower to deliver his wool at the designated distributing centers, and the expense of delivering the wool at such centers will be charged against the wool on a basis of the freight rate from point of origin to the Atlantic seaboard.

VALUING AND GRADING.

As soon as possible after the arrival of the wool at a distributing center, if the wool is to be taken in the original bags, it shall be valued by the Government Valuation Committee. If the wool is to be graded, it shall be valued in the piles by the Government Valuation Committee as soon as the piles are graded and ready for delivery. All grading will be conducted under Government supervision. The grades out of each clip will be weighed separately and the books of the dealer, as far as they pertain to any grower's wool, shall be open to him. Tags, bucks, black, and other recognized discount fleeces will be paid for at prices fixed by the Government. Bags will be paid for in the same manner.

PAYMENTS TO GROWERS.

Growers shall be entitled to payment on a basis of the date of the arrival of the wool as shown by the railroad receipt. However, as it would be impossible for obvious reasons to make settlement on each clip on the date of its arrival, in order that the grower may lose nothing by any delay in settlement, he shall be entitled to draw interest on the selling price of his wool less freight from the date of the wool's arrival until the date of final settlement.

Final returns will be made as promptly as possible in all cases.

COMMISSIONS.

The grower does not pay the commission or compensation for handling wools in the designated distributing centers. This commission or compensation for handling will be added to selling price of the wool and paid by the buyer.

If sold in the original bags, the commission or compensation shall be 3 per cent of the selling price. If the wool is graded, the commission or compensation shall be 3½ per cent of the selling price. This commission or compensation includes drayage, storage, and insurance for a period not exceeding on any lot six months after arrival. On any lot remaining unsold in his possession for a

longer period than six months the dealer shall be entitled to charge storage and insurance at the market rate, and this additional charge shall be added to the price of the wool.

MILLS LOCATED IN WOOL-GROWING DISTRICTS.

In order that the Government may have full control of the wool situation, with a view to conserving as far as may be necessary the wool supply for military purposes, it is considered necessary to prohibit manufacturers from buying wool, except in the designated distributing centers, and then only with the permission and consent of the Government under such regulations as the Government may hereafter make.

However, mills located in wool-growing districts not near to the designated centers of distribution, and which are working on Government orders, will be given permits through the wool division of the War Industries Board to buy certain amounts of wool in their immediate neighborhood. In making applications for such permits, the manufacturer applying should state the number of his Government order, the amount of goods yet to be delivered against such order, the amount of his wool stock on hand, and the amount and class of wool required to complete said order. The manufacturer receiving such a permit will be required to report to the wool division of the War Industries Board all purchases made against permit issued to him.

PERMITS TO DEALERS.

All dealers in approved centers desiring a permit to operate should apply to the wool division of the War Industries Board stating their capacity for storing and grading.

All country dealers should apply for a permit to operate by writing to the wool division of the War Industries Board giving name and address.

In order to expedite movement of wool, dealers in country districts and distributing centers may operate immediately in accordance with the above regulations, pending application for and granting of permit.

Lewis Penwell,
Chief of Wool Division, War Industries Board.

GOVERNMENT WOOL PRICES, EFFECTIVE MAY 1, 1918.
DOMESTIC WOOL IN THE GREASE.

BOSTON VALUATIONS—SCOURED BASIS—AS OF JULY 30, 1917—GREASY FLEECE WOOLS.
OHIO AND SIMILAR, INCLUDING NEW ENGLAND STATES, NEW YORK, PENNSYLVANIA, WEST VIRGINIA, KENTUCKY, VIRGINIA, MICHIGAN, NEW JERSEY, DELAWARE AND MARYLAND.

	Choice.	Average.
Fine delaine.....		\$1.85
Fine clothing.....	\$1.75	1.70
1/2 Bld. staple.....		1.68
1/2 Bld. clothing.....		1.60-62
3-8 staple.....		1.45
3-8 clothing.....		1.42
1-4 Bld. staple.....		1.32
1-4 Bld. clothing.....		1.30
Low 1-4.....		1.17
Common and braid.....		1.07

MISSOURI, INDIANA, ILLINOIS, AND SIMILAR, INCLUDING IOWA, WISCONSIN, MINNESOTA, KANSAS, NEBRASKA, AND ARKANSAS.

	Choice.	Average.
Fine delaine.....		\$1.80
Fine clothing.....	\$1.70	1.65
1/2 Bld. staple.....	1.63	1.60
1/2 Bld. clothing.....	1.60	1.57
3-8 staple.....	1.40	1.37
3-8 clothing.....	1.37	1.34
1-4 Bld. staple.....	1.28	1.26
Bld. clothing.....	1.26	1.24
Low 1-4.....	1.17	1.15
Common and braid.....		1.07

GOVERNMENT WOOL PRICES, EFFECTIVE MAY 1, 1918—Continued.

GEORGIA AND LAKE WOOLS AND OTHER SOUTHERN WOOLS.

	Average.
Average lots, largely 3-8s	\$1.25
Average lots, largely 1-4s	1.20

Semibright.

Semibrights are to be classified as territory or fleece, according to the character of the lot.

TERRITORY.

	Choice.	Average.	Inferior.
Fine and fine medium staple	\$1.80	\$1.75	\$1.70
Fine and fine medium clothing	1.70	1.65	1.62
1/2 Bld. staple	1.68	1.63	1.60
1/2 Bld. clothing	1.60-62	1.58	1.53
High 3-8s staple 56-58s	1.45	1.42	1.40
High 3-8s clothing 56-58s	1.42	1.39	1.37
3-8s staple 56s	1.40	1.37	1.35
3-8s clothing 56s	1.37	1.34	1.32
Low 3-8s staple 50-56s	1.35	1.32	1.30
Low 3-8s clothing 50-56s	1.32	1.29	1.27
High 1-4 blood staple 48-50s	1.32	1.29	1.27
High 1-4 clothing 48-50s	1.30	1.27	1.25
1-4 staple 46-48s	1.28	1.26	1.24
1-4 clothing 46-48s	1.26	1.24	1.22
Low 1-4 staple 44s	1.17	1.15	1.13
Common and braid 40s	1.07	1.05	1.03

TEXAS.

Twelve months	\$1.75	\$1.70	\$1.65
Eight months	1.55	1.50	1.45
Six months	1.50	1.45	1.40

CALIFORNIA.

Twelve months	\$1.70	\$1.65	\$1.60
Eight months	1.50	1.45	1.40
Fall	1.40	.....	1.15

SOUTH AMERICAN WOOLS.

[Valuation of South American wools in the grease on a clean scoured basis.—Values as of July 30, 1917.]

ARGENTINE, MONTEVIDEO, AND CONCORDIA FLEECE WOOLS, BASIS UNITED STATES OF AMERICA STANDARD TYPES.

	Argentine.	Montevideo and Concordia.
Good 6s or 32-36s combing fleece	\$0.85	\$0.85
Good 5s or 36-40s combing fleece .....	.90	.90
Good 4s or 44-40s combing fleece	1.05	1.05
Good 3s or 46s combing fleece	1.20	1.20
Good 50s combing fleece	1.25	1.30
Good 56s combing fleece	1.35	1.40
Good 1-2 Bld. or 58-60 combing fleece	1.45	1.55
Good 60-64s combing fleece	1.55	1.60
Good 64s combing fleece	1.60	1.65
Good 64s clothing combing fleece	1.50	1.50

SOUTH AMERICAN WOOLS—Continued.

ARGENTINE, MONTEVIDEO, AND CONCORDIA BURRY COMBING FLEECE.

	Argentine.	Montevideo and Concordia.
Burly 6s or 32-36s combing fleece.....	\$0.75	\$0.75
Burly 5s or 36-40s combing fleece.....	.80	.80
Burly 4s or 44-40s combing fleece.....	.95	.95
Burly 3s or 46s combing fleece.....	1.10	1.10
Burly 50s combing fleece.....	1.15	1.15
Burly 56s combing fleece.....	1.20	1.25
Burly 1/2 bld. or 58-60s combing fleece.....	1.30	1.40
Burly 60-64s combing fleece.....	1.40	1.45
Burly 64s combing fleece.....	1.45	1.50
Burly 64s clothing combing fleece.....	1.35	1.35

In all the above burrs are considered in the shrinkage.
Argentine, Montevideo, and Corcordia, good skirting, free from bellies, same basis as Burly combing fleece.

LAMBS.

BUENOS AIRES, MONTEVIDEO, CONCORDIA, PATAGONIA, AND SIMILAR LAMBS—PRACTICALLY FREE.

	Buenos Aires.	Montevideo, Concordia, Patagonia, and similar.
Good 36-40s.....	\$0.80	\$0.80
Good 44-40s.....	.95	.95
Good 46s.....	1.00	1.05
Good 50s.....	1.05	1.15
Good 56s.....	1.15	1.25
Good 1/2 blood or 58-60s.....	1.25	1.30
Good 64s.....	1.25	1.30

BUENOS AIRES, MONTEVIDEO, CONCORDIA, PATAGONIA, AND SIMILAR SECOND CLIP WOOLS—PRACTICALLY FREE.

Good 5s or 36-40s.....	\$0.85	\$0.85
Good 4s or 44-40s.....	1.00	1.00
Good 3s or 46s.....	1.05	1.10
Good 50s.....	1.15	1.20
Good 56s.....	1.25	1.30

BELLIES.

BUENOS AIRES, MONTEVIDEO, CONCORDIA, AND SIMILAR BELLIES.

5s or 25-40s.....	\$0.75
4s or 44-40s.....	.90
3s or 46s.....	.95
50s.....	1.05
56s.....	1.15
58-60s.....	1.25
64s.....	1.25

Burrs included in shrinkage.

PUNTA ARENA FLEECE.

[Skirted, U. S. A. style.]

36-40s good combing fleece.....	\$0.90
44-40s good combing fleece.....	1.00
46s good combing fleece.....	1.20
50s good combing fleece.....	1.30
56s good combing fleece.....	1.40
58-60s good combing fleece.....	1.55
64s good combing fleece.....	1.60

PUNTA ARENAS, BELLIES AND PIECES.

36-40s clothing.....	\$0.80
44-40s clothing.....	.90
46s clothing.....	1.10
50s clothing.....	1.20
56s clothing.....	1.30
58-60s clothing.....	1.45
64s clothing.....	1.50

BELLIES—Continued.

PERUVIAN WASHED.

White supermerino	\$1. 50
White average merino	1. 30
White choice No. 1	1. 27
White average No. 1	1. 20
White average No. 2	1. 10
Gray merino	1. 25
Gray average No. 1	1. 08
White pieces and locks	1. 00
Stained	1. 15

ICELAND WASHED.

Choice washed	\$0. 90
Average	. 85

CHILEAN UNWASHED.

Merino spring 56-60s	\$1. 30
Merino Mestiza Fall carding	1. 12
Mestiza choice Valdivian Spring 46-56s broad	1. 23
Mestiza average spring 56-58s, some 60s	1. 28
Doma average spring 44-46s	1. 10
Common average spring 40-36s	. 85
Cordillera average carding, bulk 50	1. 18
18A gray (carding) 46-56s	1. 15

PERUVIAN UNWASHED.

Choice 50-58s	\$1. 30
Average 46-56s broad	1. 12
Low 36-40s	. 85
Black 44-46s	1. 00
Gray 40-46s	. 90

UNWASHED ECUADORIAN.

Ecuadorian 40-36s	\$0. 85
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UNWASHED BOLIVIAN.

Bolivian 46-56s	\$1. 12
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WASHED BOLIVIAN.

Washed Bolivian 50-56s	\$1. 20
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FOREIGN BLACK AND GRAY—COMBING AND CLOTHING.

	Combing.	Clothing.	Blacks.
44-40s (gray)	\$0. 90	\$0. 85	\$1. 00
46s (gray)	1. 05	1. 00	1. 10
50s (gray)	1. 15	1. 15	1. 25
56s (gray)	1. 25	1. 25	1. 35
58-60s (gray)	1. 30	1. 30	1. 40
60-64s and fine (gray)	1. 50	1. 50	1. 60
Iceland (gray)	. 90		
China (gray)	. 60- . 70	¹ . 70- . 80	. 80-1. 00
Peruvian (gray)	² 1. 12	¹ 1. 25	1. 25-1. 40
Bolivian (gray)	³ . 80- . 90		1. 00
Chili (gray)	³ . 70-1. 20		
Ecuador (gray)	³ . 60- . 85		
Spanish (gray)	³ . 70- . 85	1. 00-1. 30	¹ 1. 30-1. 50
Cape Coa and colored	³ . 40-1. 25		¹ . 75-1. 50
Greek, black and gray	³ . 60- . 75		

¹ Fine.

² Low.

³ Pulled cloth.

Burly and seedy, cotts same basis as burly combing.

SCOURED WOOLS.

[Valuation of scoured fleece wool on the basis of values as of July 30, 1917.]

TERRITORY AND FLEECE.

Scoured fine and fine medium	\$1. 62
Scoured fine and fine medium territory choice	1. 70
Scoured fine medium	1. 60
Scoured 3-8's territory	1. 45
Scoured 1-4's territory, New Mexican	1. 23
Scoured low territory, New Mexican	1. 00
Scoured fine California (baled)	1. 54
Scoured medium California (baled)	1. 40
Scoured defective fine California (baled)	1. 15
Scoured slightly defective fine California (baled)	1. 38
Carbonized fine California (baled)	1. 50
Carbonized medium California (baled)	1. 36
Scoured fine short Texas	1. 60
Scoured domestic fine sorts	1. 10
Scoured fine sorts	1. 37
Scoured domestic medium sorts	1. 05

SCOURED WOOLS—Continued.

SOUTH AMERICAN SHORN LAMBS.

Concordia, Patagonia, Montevideo, Pasto Fuerte, and similar lambs:

Scoured 50-56s-----\$1.25

BUENOS AIRES LAMBS.

Scoured Buenos Aires lambs, 46s-----\$1.15
 Scoured Buenos Aires Hoggetts, 46s-----1.15
 Carbonized Buenos Aires lambs, 46s-----1.15
 Carbonized Buenos Aires lambs, 40-44s-----1.10

SOUTH AMERICAN SECOND CLIP FLEECE.

Patagonia, Pasto Fuerte, Concordia, Montevideo, and similar:

Scoured (bulk) 56s-----\$1.35
 Scoured 50-56s-----1.30
 Scoured 50s-----1.25
 Scoured 46-50s-----1.20
 Scoured (bulk) 44s-----1.15
 Carbonized 50-56s-----1.35
 Carbonized 46-50s-----1.17
 Carbonized (bulk) 44s-----1.12

SOUTH AMERICAN BALED.

Scoured Buenos Aires 46-50s-----\$1.25
 Scoured Buenos Aires (bulk) 44s-----1.10
 Scoured Chubut 60-64s-----1.65

SOUTH AMERICAN PIECES AND BELLIES.

Scoured Punta Arenas, 50s-----\$1.25
 Scoured Punta Arenas, 46s-----1.17

CHILIAN.

Scoured 1-2 blood-----\$1.25
 Scoured 3-8s-----1.10
 Scoured gray and stained low quarter-----80
 Scoured common-----70
 Merino-----1.35

PERUVIAN.

Scoured No. 1, 3-8s-----\$1.22
 Scoured No. 2, quarter-----1.12
 Scoured gray low, 3-8s-----1.12

CAPE.

Scoured fine, fair staple (bags)-----\$1.48
 Scoured fine, snow-white (baled), average-----1.60
 Scoured fine, snow-white (baled), choice-----1.70
 Scoured fine (baled), inferior-----1.32
 Scoured fine, stained (baled)-----1.25
 Scoured fine, stained (baled), inferior-----1.00
 Scoured grey (baled), average-----85
 Scoured grey (baled), coarse-----60
 Scoured fine choice long (bags)-----1.70
 Scoured fine good staple (bags)-----1.55
 Carbonized fine (bags)-----1.62
 Scoured No. 2 (baled)-----1.25

SCOURED AUSTRALIAN FLEECE WOOL.

	70's and better.	64-70's.	60-64's.
Extra super, scoured.....	\$1.80	\$1.65	\$1.65
Choice scoured, good length, sound; free or practically free.....	1.75	1.70	1.60
Best carding, bulky, free.....	1.70	1.65	1.55
Good carding, fairly free.....	1.60	1.55	1.45
Good average combing, scoured Queensland, nearly free.....	1.65	1.60	1.50
Average combing scoured, fairly free.....	1.55	1.50	1.40
Good combing pieces and bellies.....	1.50	1.45	1.35
Average length carbonizing, bellies, pieces.....	1.45	1.40	1.30
Shivvy fleeces, thinly grown.....	1.40	1.35	1.30

	80's.	70's.	64-70's.	60-64's.
Super clothing, free.....	\$1.75	\$1.70	\$1.60	\$1.50
Good clothing, free.....	1.65	1.60	1.55	1.45
Average clothing, nearly free, carbonizing.....	1.55	1.50	1.45	1.35

SCOURED WOOLS—Continued.

TOPS.

[Prices as of July 30, 1917.]

Grade :	
36s	\$1. 00
40s	1. 05
44s	1. 20
46s	1. 35
50s	1. 50
56s	1. 62
58s	1. 84
60s	1. 95
64s	2. 05
66s	2. 12
82s and below (carpet tops) at corresponding values.	

PULLED WOOL.

[Valuation on domestic and foreign pulled wools in the grease on a clean basis. Scouring costs not included. All values as of July 30, 1917.]

DOMESTIC COMBINGS.

AA combing, 64s	\$1. 80
A combing, 60s	1. 70
B combing, 56-50s	1. 55
C combing, 46-50s	1. 43
Low combing, 44-40s	1. 25
Butt combing, average 36s	1. 00

DOMESTIC STAPLE.

AA staple, 64s	\$1. 78
A super staple, 60s	1. 70
B super staple, 56-50s	1. 52
C super staple, 44-50s	1. 42

DOMESTIC CLOTHING.

AAA clothing, 70s	\$1. 85
AA clothing, 64s	1. 72
A super clothing, 58-56s	1. 60
B super clothing, 50s	1. 46
C super clothing, 44s	1. 33
Low C	. 95
Gray B super	1. 28
Gray C super	1. 18
Short gray	. 92
A shearlings	1. 25
B shearlings	1. 15
C shearlings	. 90
White vat	. 35

SPANISH PULLED.

Choice white fine	\$1. 10
Average white	. 85
Choice black	1. 32
Average black	. 82
Low black	. 65
Low medium white	. 75
Low	. 65

MONGOLIAN.

Choice No. 1 white	\$0. 68
Low white	. 55
Choice No. 1 gray	. 68
Low gray	. 50

CHINA.

Choice No. 1 white	\$0. 85
Average white	. 78
Average gray	. 48

EAST INDIA.

Low white	\$0. 55
Low medium yellow	. 80

CORDOVA.

White combing	\$0. 65
Fine white clothing	. 85

ITALIAN.

White skin wool	\$0. 45
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ICELAND.

No. 2 skin wool	\$0. 80
No. 1 Iceland	. 90

PULLED WOOL—Continued.

SOUTH AMERICAN PULLED.

Fine combing.....	\$1. 65
AA staple (choice), 60-64s.....	1. 70
Half blood or 58-60s combing.....	1. 55
A combing (choice), 56-58s.....	1. 55
56s combing.....	1. 45
B combing (choice), 50-56s.....	1. 50
50s combing.....	1. 35
C combing (choice), 46-50s.....	1. 35
46s combing.....	1. 25
Low combing (choice), 44s.....	1. 15
44-40s combing.....	1. 10
Lincoln combing (choice), 36s, 40s.....	1. 00
Do.....	. 95
AA clothing, 60-64s.....	1. 65
A clothing, 56s.....	1. 52
B clothing, 50s.....	1. 42
C clothing, 44-40s.....	1. 12
Lincoln clothing, 36s.....	. 95

PULLED CAPE.

AA staple, 64s.....	\$1. 75
AA clothing, 64s.....	1. 55

SCOURED PULLED WOOLS.

[Valuation of scoured pulled wool on the basis as of July 30, 1917.]

DOMESTIC PULLED.

Scoured domestic, AA superpulled choice.....	\$1. 75
Scoured domestic, AA superpulled average.....	1. 65
Scoured domestic, A superpulled choice.....	1. 65
Scoured domestic, low A superpulled choice.....	1. 53
Scoured domestic, A superpulled western.....	1. 50
Scoured domestic, high B choice.....	1. 50
Scoured domestic, B superpulled.....	1. 43
Scoured domestic, B superpulled western.....	1. 35
Scoured domestic, C superpulled choice.....	1. 28
Scoured domestic, C superstained pulled.....	1. 05
Scoured domestic, C superlow stained pulled.....	. 95
Scoured domestic, gray B superpulled.....	1. 23

SOUTH AMERICAN PULLED.

Scoured fine.....	\$1. 70
Scoured 56-58s.....	1. 55
Scoured 50s.....	1. 45
Scoured 46s.....	1. 30
Scoured 40-44s.....	1. 15
Scoured Lincoln.....	1. 00

AUSTRALIAN.

[Valuation of Australian greasy fleece combing on a clean basis as of July 30, 1917.]

Type.	70s.	66-70s.	64s.	60s.
Extra super spinners, choicest style.....	\$1. 95	\$1. 98	\$1. 90	\$1. 85
Spinners, good length, free.....	1. 90	1. 88	1. 85	1. 80
Average spinners, bright and attractive, few burrs.....	1. 85	1. 83	1. 80	1. 75
Super French combing, free.....	1. 80	1. 78	1. 75	.....
Shafly combing, showy, bright but tender, free or nearly.....	1. 80	1. 78	1. 75	1. 70
Shafly combing, sound, but more or less burry.....	1. 78	1. 76	1. 75	1. 68
Good top makers, irregular quality and length, but fairly free..	1. 80	1. 78	1. 75	1. 70
Average top makers, irregular quality and length, but fairly free.	1. 75	1. 73	1. 70	1. 65
Good French combing, fairly free.....	1. 75	1. 73	1. 70	1. 65
French combing, few burrs.....	1. 68	1. 66	1. 63	1. 58
Average combing, more or less burrs.....	1. 70	1. 67	1. 65	1. 60
Average length combing, very burry or suitable for carbonizing..	1. 60	1. 55	1. 50	1. 45
French combing, very burry, or suitable for carbonizing.....	1. 50	1. 45	1. 40	1. 35

CLOTHING.

Type.	80s.	70s.	64-70s.
Extra super, regular length, absolutely free.....	\$1. 85	\$1. 80	.....
Choice clothing, absolutely free.....	1. 80	1. 75	1. 65
Average clothing, free or nearly free.....	1. 70	1. 65	1. 55
Average clothing, some fault.....	1. 60	1. 55	1. 50
Faulty, irregular 64-80s.....	.....	.....	1. 40

¹ Basis of prices as per the committee's report on which all valuations contained herein are based.

AUSTRALIAN—Continued.

BROKEN NECKS AND PIECES—COMBINGS.

Type.	64s.	60-64s	60s.
Extra super combing, Geelong and N. E. types.....	\$1.80	\$1.75	\$1.70
Good length combing, sound, free or nearly free.....	¹ 1.75	1.70	1.65
Average length, sound, free or nearly free.....	1.70	1.65	1.60
Average length, tender, free or nearly free.....	1.60	1.55	1.50
Good length, sound, few burrs or seeds.....	1.65	1.60	1.55
Average length, sound, few burrs or seeds.....	1.60	1.55	1.50
French combing, few burrs or seeds.....	1.55	1.50	1.45
Good length combing, very burry.....	1.60	1.55	1.50
Average length combing, very burry.....	1.50	1.45	1.40
French combing, very burry.....	1.40	1.35	1.30

STAINED PIECES AND CARBONIZING PIECES.

Type.	64s and better.	60-64s.
Good length carbonizing bellies.....	\$1.25	\$1.15
Average length carbonizing bellies.....	1.15	1.05
Short length carbonizing bellies.....	1.00	.90
Good length combing stained pieces, free or nearly free.....	1.50	1.40
Average length combing, free or nearly free stained pieces.....	1.45	1.35
Good length combing stained pieces, burry.....	1.35	1.25
Average length combing stained pieces, burry.....	1.25	1.15
Bulky carbonizing stained pieces.....	1.10	1.00
Average carbonizing stained pieces.....	1.00	.90
Inferior carbonizing stained pieces.....	.80	.70

Carbonizing charges not included.

COMBING BELLIES.

Type.	64-70s.	60-64s.	60s.
Super combing bellies, sound, free.....	\$1.70	\$1.60	\$1.50
Good length combing bellies, sound, free or nearly free.....	¹ 1.65	1.55	1.50
Average length combing bellies, free or nearly free, sound.....	1.55	1.45	1.40
French combing bellies, fairly free.....	1.45	1.35	1.30
Good length combing bellies, more or less burry and seedy or tender.....	1.45	1.35	1.30
Average length combing bellies, more or less burry and seedy or tender....	1.35	1.25	1.15
French combing bellies, more or less burry or seedy.....	1.30	1.20	1.15
Combing bellies, very burry.....	1.25	1.15	1.10

¹ Basis of prices as per the committee's report on which all valuations contained herein are based.

MERINO LAMBS.

Extra super geelong lambs free.....		\$1.70
Super, practically free.....		1.60
Average length second super, practically free.....		1.55
Short free lambs.....		1.40
Good length, more or less burrs.....	} carbonizing.....	1.40
Medium length, more or less burrs..		1.35
Irregular length, more or less burrs..		1.20
Short length, more or less burrs.....		1.10
Inferior Kempy, carbonizing.....		.80

MERINO LOCKS.

Good length locks free.....	\$1.20
Average length locks free.....	1.10
Short length locks free.....	1.00
Bulky locks, carbonizing.....	1.00
Average length locks, carbonizing.....	.90
Short length locks, carbonizing.....	.80

Carbonizing charges not included.

WEANERS.

	70s.	64s.	60s.
First combing weaners.....	\$1.60	\$1.55	\$1.50
Second combing weaners.....	1.30	1.25	1.20

¹ This price taken as basis; 10 cents carbonizing charges added to same is equivalent to the committee's basis of \$1.40.

GREASY AUSTRALIAN AND NEW ZEALAND FLEECES—GOOD.

(Scoured basis as of July 30, 1917.)

36s.....	\$0.95	50s.....	\$1.45
40s.....	1.00	50-56s.....	1.50
44s.....	1.15	56s.....	1.55
46s.....	1.30	58s.....	1.70
48-50s.....	1.35		

CARPET.

	Per cent.	July 30, 1917.		
		Grease price.	Basis scoured.	Scoured.
Handshaken fleece, No. 1 white sining.....	40	\$0.43	\$0.72	\$0.90
Willowed, No. 2 white sining.....	36	.36	.59	.65
Handshaken fleece, black sining (super).....	42	.39	.67	.76
Handshaken fleece, gray sining.....	42	.39	.67	.73
Handshaken fleece, stained sining.....	46	.36	.67	.72
Willowed, No. 2 gray.....	26	.37	.57	.62
Handshaken semi-carbonized No. 1 white (good).....	48	.38	.73	.85
Government type, white, Szechuen.....				.75
Sundried, No. 1 white Szechuen.....	36	.41	.63	.68
Sundried, No. 2 white Szechuen.....	48	.28	.54	.60
Sundried, gray Szechuen.....	39	.36	.59	.65
Washed, No. 1 white ball (super).....	9	1.00	1.10	1.10
Government type, ball China.....	25	.71	.95	.95
Willowed, No. 2 white ball.....	33	.38	.67	.69
Willowed, No. 1 gray ball.....	28	.65	.87	.90
Willowed, No. 2 gray ball.....	35	.36	.58	.58
Willowed, open ball.....	42	.45	.77	.85
Handshaken, best unassorted fleece (A).....	48	.36	.70	.82
Handshaken, medium unassorted fleece (C).....	47	.35	.68	.80
Handshaken, low unassorted fleece (D).....	46	.33	.61	.61
Willowed, best white filling (A).....	37	.43	.68	.80
Willowed, good white filling (B).....	26	.42	.66	.75
Willowed, fair white filling (C).....	36	.39	.61	.61
Willowed, low white filling (D).....	35	.37	.57	.57
Willowed, short white filling (cuttings).....	28	.23	.46	.52
Willowed, best gray filling.....	38	.39	.63	.71
Willowed, fair gray.....	26	.26	.58	.65
Willowed, low filling.....	26	.26	.54	.64
Willowed, China autumn.....	23	.43	.64	.70
Handshaken, China No. 1 fleecy super lambs.....	38	.56	1.23	1.40
Handshaken, China No. 2 fleecy lambs.....	36	.50	1.10	1.23
Handshaken, China No. 3 fleecy lambs.....	35	.43	.95	.95
Willowed, China lambs.....	26	.71	1.10	1.15
Government type, China No. 1 woosie, spring.....	27	.40	.64	.65
Government type, China No. 1 woosie, autumn.....	40	.36	.60	.70
Government type, China No. 2 woosie, autumn or spring.....	65	.15	.43	.43
Washed, China Shanghai.....	36	.32	.49	.55
Handshaken, China Honan, unassorted.....	52	.28	.58	.58
Washed Mongolian, average (Urga).....	23	.52	.68	.78
Washed Manchurian, white (Hallar).....	26	.46	.61	.62
Washed Manchurian, gray.....	30	.39	.55	.65
Unwashed Cordova, good carbonized, white.....	30	.38	.70	.80
Unwashed Cordova, good carbonized, gray.....	30	.37	.74	.78
Unwashed Cordova, second clip, white.....	44	.39	.70	.85
Ecuador.....	70	.23	.77	.85
Caribbean.....	60	.26	.65	.75
Spanish, coarse carbonized, white.....	36	.37	.60	.60
Spanish, good carbonized, white.....	50	.37	.74	.82
Spanish, white, mattress.....	22	.40	.51	.51
Spanish, gray, mattress.....	40	.18	.30	.30
Macedonian, white, combing.....	47	.36	.68	.68
Macedonian, black, combing.....	50	.31	.62	.62
Oporto.....	60	.26	.62	.62

GOVERNMENT ISSUE PRICES TO MANUFACTURERS HOLDING GOVERNMENT CONTRACTS MAY 15, 1918.

The issue prices of wool for Government contracts are based on the valuation committees' description and estimate of shrinkage of each lot. The Government does not guarantee the estimated shrinkages of the valuation committees, but believes them to be approximately correct. Samples of each lot will be shown at the office of the wool distributor and are intended to fairly represent the bulk lot, but are not guaranteed to do so. They are exhibited for the convenience of manufacturers interested. Examination in bulk may be made if desired.

CONDITIONS.

- 1. Holders of Government contracts should make application for any lot or lots (or portions thereof) in writing to E. W. Brigham, 298 Summer Street, Boston. Application shall state the number of the Government contract for which the wool is required, and such other details as may be required.
- 2. The price on each lot is the price fixed by the Government and is accepted by the buyer when his application is made.
- 3. Terms are net cash within 60 days from date of allotment.
- 4. Bags or bale covers are to be charged at cost and are not to be returned. The British Government now charges for bale covers of Australian wools.
- 5. All wools or tops are to be taken at the same weights as billed to the Quartermaster Corps, which were sworn weigher's weights at time of the delivery of wool to the Quartermaster Corps.
- 6. Manufacturers may be required to give a bond for the full amount of the wool furnished.
- 7. Deliveries of all wool allotted to be taken within 30 days of date of allotment.
- 8. Storage, insurance, and drayage charges applying against each lot of wool are to be paid by the buyer.
- 9. Cartage from warehouse to railroad is to be paid by the buyer.

THE GOVERNMENT'S ISSUE PRICES ON SCOURED WOOLS.

- 1. The prices of scoured foreign wools grading 58s and lower will be July 30 prices (as established by the valuation committees) plus 7 per cent.
- 2. The prices of scoured foreign wools grading finer than 58s will be July 30 prices.
- 3. The prices of scoured domestic wools grading up to and including high three-eighths (58s quality), and in pulled scoured up to and including straight As will be July 30 prices plus 7 per cent.
- 4. The prices of scoured domestic wools finer than high three-eighths (58s quality), and in pulled scoured finer than straight As will be July 30 prices.

THE GOVERNMENT'S ISSUE PRICES ON GREASY PULLED WOOLS.

- 1. The prices of greasy foreign pulled wools grading 58s and lower will be July 30 prices (as established by the valuation committees) plus 7 per cent.
- 2. The prices of greasy foreign pulled wools grading finer than 58s will be July 30 prices.
- 3. The prices of greasy domestic pulled wools grading up to and including straight As will be July 30 prices plus 7 per cent.
- 4. The prices of greasy domestic pulled wools finer than straight As will be July 30 prices.

THE GOVERNMENT'S ISSUE PRICES ON DOMESTIC WOOLS.

Ohio and similar, including New England States, New York, Pennsylvania, West Virginia, Kentucky, Virginia, Michigan, New Jersey, Delaware, Maryland:

Issue price, scoured basis.		Issue price, scoured basis.	
Fine Delaine, choice	\$1. 95	Three-eighths staple	\$1. 55
Fine Delaine, average	1. 90	Three-eighths clothing	1. 50
Fine clothing, choice	1. 80	Quarter-blood staple	1. 40
Fine clothing, average	1. 75	Quarter-blood clothing	1. 38
Half-blood staple, choice	1. 80	Low one-fourth	1. 25
Half-blood staple, average	1. 75	Common and braid	1. 15
Half-blood clothing	1. 70		

Missouri, Indiana, Illinois, and similar, including Iowa, Wisconsin, Minnesota, Kansas, Nebraska, and Arkansas:

Issue price.		Issue price.	
Fine Delaine	\$1. 85	Three-eighths clothing	\$1. 50
Fine clothing, choice	1. 75	Quarter-blood staple	1. 40
Fine clothing, average	1. 70	Quarter-blood clothing	1. 38
Half-blood staple	1. 75	Low quarter-blood	1. 25
Half-blood clothing	1. 67	Common braid	1. 15
Three-eighths staple	1. 52		

Georgia, Lake wools, and other southern wools:

Issue price.		Issue price.	
Average lots, largely 3-8ths	\$1. 37	Average lots, largely 1-4 blood	\$1. 30

TERRITORY.		TERRITORY.	
Issue price.		Issue price.	
Fine staple:		High 1-4 clothing 48-50s:	
Choice	\$1. 90	Choice	\$1. 40
Average	1. 85	Average	1. 37
Inferior	1. 80	Inferior	1. 35
Fine clothing:		1-4 staple 46-48s:	
Choice	1. 80	Choice	1. 40
Average	1. 75	Average	1. 38
Inferior	1. 65	Inferior	1. 35
Half-blood staple:		1-4 clothing 46-48s:	
Choice	1. 80	Choice	1. 38
Average	1. 75	Average	1. 35
Inferior	1. 70	Inferior	1. 32
Half-blood clothing:		Low 1-4, 44s:	
Choice	1. 70	Choice	1. 25
Average	1. 65	Average	1. 23
Inferior	1. 60	Inferior	1. 20
High 3-8 staple 56-58s:		Common-braid 40s:	
Choice	1. 60	Choice	1. 17
Average	1. 55	Average	1. 15
Inferior	1. 50	Inferior	1. 12
Three-eighths clothing 58-58s:		TEXAS.	
Choice	1. 55	12 months:	
Average	1. 50	Choice	1. 80
Inferior	1. 45	Average	1. 75
Three-eighths staple 56s:		Inferior	1. 70
Choice	1. 55	8 months:	
Average	1. 50	Choice	1. 60
Inferior	1. 45	Average	1. 57
Three-eighths clothing 56s:		Inferior	1. 55
Choice	1. 52	6 months:	
Average	1. 47	Choice	1. 50
Inferior	1. 42	Average	1. 47
Low 3-8 staple 50-56s:		Inferior	1. 45
Choice	1. 50	CALIFORNIA.	
Average	1. 47	12 months:	
Inferior	1. 45	Choice	1. 80
Low 3-8 clothing 50-56s:		Average	1. 70
Choice	1. 48	Inferior	1. 60
Average	1. 45	8 months:	
Inferior	1. 43	Choice	1. 55
High 1-4 48-50s:		Average	1. 50
Choice	1. 45	Inferior	1. 45
Average	1. 42		
Inferior	1. 37		

NOTE.—Bucks, tags, black, seedy, and other discount fleeces will be paid for at fair prices fixed later by the Government.

THE GOVERNMENT'S ISSUE PRICES ON FOREIGN WOOLS.

[Argentine, Montevideo, Concordia fleece wools—Basis U. S. standard type.]

	Issue price.
Good 6s or 32-36s, combing fleece-----	\$0.92
Good 5s or 36-40s, combing fleece-----	1.02
Good 4s or 44-40s, combing fleece-----	1.12
Good 3s or 46s, combing fleece-----	1.28
Good 50s, combing fleece-----	1.40
Good 56s, combing fleece-----	1.50
Good 1-2 or 58-60s, combing fleece {Montevideo-----	1.70
{Argentine-----	1.65
Good 60-64s, combing fleece {Montevideo-----	1.70
{Argentine-----	1.65
Good 64s, combing fleece {Montevideo-----	1.75
{Argentine-----	1.70
Good 64s, clothing-----	1.65

AUSTRALIAN AND NEW ZEALAND CROSSBREDS.

36s	-----	\$1. 00	50s	-----	\$1. 50
40s	-----	1. 05	50-56s	-----	1. 55
44s	-----	1. 20	56s	-----	1. 60
46s	-----	1. 35	58s	-----	1. 75
46-50s	-----	1. 42			

ARGENTINE, MONTEVIDEO, AND CONCORDIA BURY COMBING FLEECE.

Burry 6s or 32-36s combing fleece	\$0. 80	Burry 56s	\$1. 34
Burry 5s or 36-40s combing fleece	. 86	Burry 58-60s	1. 50
Burry 4s or 44-40s combing fleece	1. 02	Burry 60-64s	1. 55
Burry 8s or 46s combing fleece	1. 18	Burry 64s	1. 60
Burry 50s combing fleece	1. 22	Burry 64s clothing	1. 45

In all the above burrs are considered shrinkage.

Argentine, Montevideo, and Concordia good skirtings, free from bellies, same basis as hurry combing fleece.

BUENOS AIRES, MONTEVIDEO, CONCORDIA, PATAGONIA, AND SIMILAR
LAMBS PRACTICALLY FREE.

Buenos Aires :	Issue price.
Good 36-40s -----	\$1. 00
Good 44-40s -----	1. 10
Good 46s -----	1. 15
Good 50s -----	1. 25
Good 56s -----	1. 35
1-2 or 58-60s -----	1. 40
64s -----	1. 40
Montevideo, Concordia, Patagonia, and similar :	
Good 36-40s -----	1. 00
Good 44-40s -----	1. 10
Good 46s -----	1. 15
Good 50s -----	1. 25
Good 56s -----	1. 35
Good 1-2 blood or 58-60s -----	1. 40
Good 64s -----	1. 40
Buenos Aires—Second-clip wools, practically free :	
Good 5s or 36-40s -----	1. 00
Good 4s or 44-40s -----	1. 15
Good 3s or 46s -----	1. 20
Good 50s -----	1. 30
Good 56s -----	1. 40
Montevideo, Concordia, Patagonia— Second clip :	
5s or 36-40s -----	1. 00
4s or 44-40s -----	1. 15
3s or 46s -----	1. 25
50s -----	1. 35
56s -----	1. 45
Buenos Aires, Montevideo, and Con- cordia, and similar bellies :	
5s or 36-40s -----	. 82
4s or 44-40s -----	. 98
3s or 46s -----	1. 08

Buenos Aires, Montevideo, and Con- cordia, and similar bellies—Con- tinued.	Issue price.
50s -----	1. 10
56s -----	1. 25
58-60s -----	1. 35
64s -----	1. 40
Burrs included in shrinkage.	
Punta Arenas fleece, skirted, Ameri- can style :	
36-40s combing fleece -----	1. 02
44-40s combing fleece -----	1. 12
46s combing fleece -----	1. 30
50s combing fleece -----	1. 40
56s combing fleece -----	1. 50
58-60s combing fleece -----	1. 70
64s combing fleece -----	1. 70
Punta Arenas bellies and pieces :	
36-40s clothing -----	1. 00
44-40s clothing -----	1. 10
46s clothing -----	1. 25
50s clothing -----	1. 35
56s clothing -----	1. 45
58-60s clothing -----	1. 55
64s clothing -----	1. 60
Foreign pulled wools :	
36-40s combing -----	1. 05
44-40s combing -----	1. 20
46s combing -----	1. 40
50s combing -----	1. 45
56s combing -----	1. 55
1 blood, or 58-60s combing -----	1. 65
Fine combing -----	1. 75
Greasy Cape Merinos :	
64s deep combing -----	1. 70
64s average fair combing -----	1. 63
64s good average clothing -----	1. 50

THE GOVERNMENT'S ISSUE PRICES ON AUSTRALIAN WOOLS—GREASY FLEECE.

[Clean scoured basis.]

Type.	70s.	66-70s.	64s.	60s.
Extra super spinners, choicest style.....	\$1. 95	\$1. 93	\$1. 90	\$1. 85
Spinners, good length, free.....	1. 90	1. 88	1. 85	1. 80
Average spinners, bright and attractive, few burrs.....	1. 85	1. 83	1. 80	1. 75
Super French combing, free.....	1. 80	1. 78	1. 75	.....
Shafly combing, showy, bright but tender, free or nearly.....	1. 80	1. 78	1. 75	1. 70
Shafly combing, sound, but more or less burry.....	1. 78	1. 76	1. 75	1. 68
Good top makers, irregular quality and length, but fairly free..	1. 80	1. 78	1. 75	1. 70
Average top makers, irregular quality and length, but fairly free.	1. 75	1. 73	1. 70	1. 65
Good French combing, fairly free.....	1. 75	1. 73	1. 70	1. 65
French combing, few burrs.....	1. 68	1. 66	1. 63	1. 58
Average combing, more or less burrs.....	1. 70	1. 67	1. 65	1. 60
Average length combing, very burry or suitable for carbonizing	1. 60	1. 55	1. 50	1. 45
French combing, very burry, or suitable for carbonizing.....	1. 50	1. 45	1. 40	1. 35

CLOTHING.

Type.	80s.	70s.	64-70s.
Extra super, regular length, absolutely free.....	\$1. 85	\$1. 80	.....
Choice clothing, absolutely free.....	1. 80	1. 75	\$1. 65
Average clothing, free or nearly free.....	1. 70	1. 65	1. 55
Average clothing, some fault.....	1. 60	1. 55	1. 50
Faulty, irregular 64-80s.....	.....	.....	1. 40

BROKEN NECKS AND PIECES—COMBING.

[Clean scoured basis.]

Type.	64s.	60-64s.	60s.
Extra super combing, Geelong, and N. E. types.....	\$1. 80	\$1. 75	\$1. 70
Good length combing, sound, free, or nearly free.....	1. 75	1. 70	1. 65
Average length, sound, free, or nearly free.....	1. 70	1. 65	1. 60
Average length, tender, free, or nearly free.....	1. 60	1. 55	1. 50
Good length, sound, few burrs or seeds.....	1. 65	1. 60	1. 55
Average length, sound, few burrs or seeds.....	1. 60	1. 55	1. 50
French combing, few burrs or seeds.....	1. 55	1. 50	1. 45
Good length combing, very burry.....	1. 60	1. 55	1. 50
Average length combing, very burry.....	1. 50	1. 45	1. 40

STAINED PIECES AND CARBONIZING PIECES.

[Clean scoured basis.]

Type.	64-70s.	60-64s.
Good length carbonizing bellies.....	\$1.25	\$1.15
Average length carbonizing bellies.....	1.15	1.05
Short length carbonizing bellies.....	1.00	.90
Good length combing stained pieces, free or nearly free.....	1.50	1.40
Average length combing, free or nearly free stained pieces.....	1.45	1.35
Good length combing stained pieces, burry.....	1.35	1.25
Average length combing stained pieces, burry.....	1.25	1.15
Bulky carbonizing stained pieces.....	1.10	1.00
Average carbonizing stained pieces.....	1.00	.90
Inferior carbonizing stained pieces.....	.80	.70

Carbonizing charges not included.

SCOURED WOOLS.

[Clean scoured basis.]

Type.	80s.	70s and above.	64-70s.	60-64s.
Choicestoured, good length, sound, free or practically free.....		\$1.75	\$1.70	\$1.60
Best carding, bulky, free.....		1.70	1.65	1.55
Good carding, fairly free.....		1.60	1.55	1.45
Good average combing, scoured, Queensland, nearly free.....		1.65	1.60	1.50
Average combing, scoured, fairly free.....		1.55	1.50	1.40
Super clothing, free.....	\$1.75	1.70	1.60	1.50
Good clothing, free.....	1.65	1.60	1.55	1.45
Average clothing, nearly free.....	1.55	1.50	1.45	1.35
Good combing, pieces and bellies.....		1.50	1.45	1.35
Shivv fleece, thinly grown.....		1.40	1.35	1.30

Other scoured wools to be valued on the basis of greasy wools of similar type.

COMBING BELLIES.

[Clean scoured basis.]

Type.	64-70s.	60-64s.	60s.
Super combing bellies, sound, free.....	\$1.70	\$1.60	\$1.50
Good length combing bellies, sound, free or nearly free.....	1.65	1.55	1.40
Average length combing bellies, free or nearly free, sound.....	1.60	1.50	1.45
Good length combing bellies, more or less burry or seedy.....	1.45	1.35	1.20
Average length combing bellies, more or less burry or seedy.....	1.35	1.25	1.20
French combing bellies, more or less burry or seedy.....	1.30	1.20	1.15
Combing bellies, very burry.....	1.25	1.15	1.10

MERINO LAMBS.

[Clean scoured basis.]

Extra super (Geelong lambs, free.....	\$1.70
Super, practically free.....	1.60
Good length, free or nearly free.....	1.40
Medium length, free or nearly free.....	1.30
Short length, free or nearly free.....	1.10
Inferior length, kempy, carbonizing.....	.80

MERINO LOCKS.

Good length locks, free.....	\$1.20
Average length locks, free.....	1.10
Short length locks, free.....	1.00
Bulky locks, carbonizing.....	.85
Average length locks, carbonizing.....	.75
Short length locks, carbonizing.....	.65

Carbonizing charges not included.

WEANERS.

	70s.	64s.	60s.
First combing weaners.....	\$1.60	\$1.55	\$1.50
Second combing weaners.....	1.30	1.25	1.20

TOPS.

The Government has a small amount of tops in stock. These will be shown and priced upon application.

6. HIDES, SKINS, AND LEATHER.

The regulation of the prices of hides, skins, and leather began with the control of imports, administered through the license system. On December 15, 1917, the Tanners' Council of the United States of America (Inc.), was designated by the War Trade Board as the consignee of hides, skins, and leather imported into the United States.¹

On March 20, 1918, the woolpullers agreed to give the Government an option on all skins pulled by them, at maximum prices fixed for April, May, and June, on a basis of 14 cents per square foot on all leather suitable for jerkins. At the same time prices were established on four grades of leather at 16 cents, 18 cents, 20 cents, and 23 cents. the average price for finished jerkin leather approximating 18½ cents.²

On May 19, 1918, the War Industries Board made public the following statement of its policy concerning the prices of hides, skins, and leather:³

As the war needs of the Government for leather products of various kinds are so large as to necessitate some measure of control over the hide and leather industry, a meeting was called of those interested in the hide business for the purpose of discussing ways and means of stabilizing the prices of hide and skins.

At this meeting were representatives of the Cattle Men's Association, the Hide and Skin Importer's Association, the packers, the country hide dealers, the hide brokers, and the Food Administration.

DIFFERENCES OF OPINION ADJUSTED.

While there was great difference of opinion among the various interests represented as to what a fair and reasonable maximum price on hides and skins should be for the next 90 days, the representatives of the industry as a committee of the whole finally recommended to the price-fixing committee of the War Industries Board the maximum prices on the attached schedules to be established by the Government on hides and skins.

After several meetings and lengthy discussions the price-fixing committee, with exhaustive information, not only as to the present position of the industry but as to the near-future developments, finally concluded that the prices named on the list for May, June, and July, while a little higher than their differential value of the present stock and the present market prices, were reasonable, so the Government has adopted the schedule of maximum prices as they relate to present stocks of domestic hides and skins, and to the list for May, June, and July.

As the Government, through an import-license system, exercises full control over all imported hides and skins, the price-fixing committee has fixed maximum prices until July 31 on hides and skins similar to those produced in this country at the same price fixed for our domestic producers, and all other hides and skins, as per list attached. This differs somewhat from the views expressed by the hide committee regarding the fixing of prices on imported hides and skins.

¹ War Trade Board Journal, Jan. 8, 1918. For the rules governing the administration of the licenses see bulletins issued by the Tanners' Council, Dec. 20, 1917, and Feb. 28, 1918.

² Report of the hides, leather, and tanning materials section of the War Industries Board to Chairman Baruch, Jan. 1, 1918.

³ Official Bulletin, May 19, 1918.

FUTURE MEETING ARRANGED.

A meeting will be held two weeks before the expiration of the present agreement, which expires July 31, 1918, for the purpose of considering the situation and with a view of fixing maximum prices for a further period.

The price-fixing committee will call a meeting of the tanners at once with a view of establishing fair and equitable prices on leather, and will endeavor to see that leather products will reach the consumer at fair and equitable prices.

The supervision and carrying into effect of the decision of the price-fixing committee will be executed by the hide and leather section of the War Industries Board.

In June, 1918, the War Trade Board restricted the importation of hides and skins, tanned skins, leather, and manufactures of leather. All licensees were required to give an option to the Government at the fixed prices.

Action to restrict importations of hides, skins, leather, tanned skins, and manufactures of leather has been taken by the War Trade Board, which have revoked all outstanding import licenses for hides, skins, leather, tanned skins, and manufactures of leather as to ocean shipments after June 15, 1918. Hereafter no licenses for shipments from overseas will be issued except for—

(a) Shipments from South America of 57,000 long tons of cattle hides of specified weights and grades.

(b) Shipments of other grades of hides or skins from any Allies or neutral countries as may be certified by the War Industries Board to be for Government use.

(c) Shipments of leather, tanned skins, or manufactures of leather as may be certified by the War Industries Board to be for Government use.

The usual exceptions for shipments overland or by lake from Canada, overland from Mexico, or as back haul from European ports when loaded at convenient ports and without delay are made.

The licenses covering the foregoing shipments will be issued according to such allocations of the various commodities as may be made by the hide and leather control section of the War Industries Board. All importers of the foregoing commodities are to be required as a condition precedent to the indorsement of bills of lading by the Tanners' Council to give the United States an option to purchase such of these commodities on which a maximum price has been established by the price-fixing committee appointed by the President at prices so fixed.¹

The lifting of control.—The regulation of the prices of foreign hides and skins was discontinued January 1, 1919.

Fixed prices on domestic hides and skins expired by limitation on January 31, 1919.

War Trade Board Ruling No. 43, dated December 20, 1918, revoked the restrictions of July 16, 1918, and on January 9, 1919, the board announced that the import licenses for hides and skins would be issued thereafter without the provision that the bill of lading be indorsed to the Tanners' Council. (War Trade Board Ruling 492.)

PRICE SCHEDULES.

On July 23, 1918, the price schedules for August, September, and October were announced, providing the following changes in the earlier schedules.²

The following price changes were agreed upon at a meeting of the hide interests in the United States with the price-fixing committee of the War Industries Board on July 19, 1918:

Packer hides.—Heavy native steers, No. 1, 30 cents; heavy butt-branded steers, No. 1, 28 cents; heavy Texas steers, No. 1, 28 cents; heavy Colorado steers, 27 cents; light native cows, No. 1, 24 cents.

¹ War Trade Board Ruling 141, June 16, 1918.

² Official Bulletin, July 23, 1918.

PRICES OF COUNTRY HIDES.

Country hides (for best sections).—Extremes, 25 to 45 pounds, 22 cents; buffs, 45 to 60 pounds, 21 cents.

All country hides are to be bought and sold on a selected basis.

River Plate Frigorifico hides.—Maximum price on steers, \$53 Argentina gold; maximum price on cows, \$40 Argentina gold (f. o. b. shipped, including export duty and lighterage, but not including salting charges).

The new schedule applies to August, September, and October take-off on all domestic hides and skins, and August, September, and October shipment from origin of all foreign hides and skins.

BASIS FOR DIFFERENTIALS.

These prices are the basis for all other differentials, which will be published in due course. These readjustments of maximum fixed prices will more nearly equalize the actual market conditions as reflected in prices of country hides and need not affect the prices of cattle. There have been widespread complaints that the small hide producer has been unable, owing to marketing conditions, to secure a fair price for his hides. The War Industries Board has, therefore, under consideration the appointment by permit of hide dealers, similar to the system adopted in wool.

Definition of maximum prices.—On August 13, 1918, the chief of the hide, leather, and leather goods division of the War Industries Board issued the following statement concerning the nature of "maximum" prices:

It should be understood that maximum prices do not mean fixed prices. Maximum prices merely establish a level beyond which commodities or grades and selections of commodities can not sell, and are established to stabilize the industry in order to protect the industry, the Government, and the community at large against a runaway market.

Within the Maximum prices the law of supply and demand should have its influence on trade prices of all commodities or grades and selections of commodities. The price-fixing committee does not intend that maximum prices shall obtain unless such prices are justified by the law of supply and demand.

In fixing maximum prices on leather, the price-fixing committee has and will endeavor to cover all important kinds, grades, and selections, and provides the means to fix maximum prices for all possible differentials.

In all cases where differential kinds, grades, and selections present themselves on the market and an agreement as to their relative value compared with the nearest kind, grade, or selection for which maximums have been fixed can not be arrived at to the satisfaction of buyer and seller, the facts should be referred to the hide, leather, and leather-goods division of the War Industries Board for consideration, and, if necessary, for submission to the price-fixing committee for decision.

The prices established for November and December, 1918, and January, 1919, were announced on October 30, 1918.¹

The price-fixing committee of the War Industries Board has established maximum prices on packer and country hides and skins for November, December, and January take-off. This action has been taken after several conferences with representatives of the producers, tanners, packers, country hide dealers, and also Government departments, which are vitally interested. The basis of prices, as compared with August, September, October maximum prices, remains unchanged, but differentials have been established to correspond to the poorer quality of the hides as they go into the winter season. The basic prices, as established for November, December, and January take-off are mentioned below:

November, December country hides and kips are three-quarters cent less, and January hides are a cent and one-half less than August, September, October, and packers are 1 cent less for November, December and 2 cents less for January.

All 44-cent calfskins are lowered to 40 for November, December, January, and other calf have been lowered correspondingly.

Imported wool sheepskins and imported pickled sheepskins.—The importer will be required to sign as follows at the time he applies for a license:

"In consideration of license being granted by the War Trade Board for the importation of wool sheepskins and pickled sheepskins, we agree that we will

¹ Official announcement of price-fixing committee, Oct. 30, 1918.

not sell them in excess of their value relative to the various kinds and selections that have been established on domestic pelts by the price-fixing committee appointed by the President."

HIDES AND SKINS.

Below are given the regulations and schedules of fixed prices announced on the indicated dates by the various price-fixing agencies.

DOMESTIC PACKER HIDES.

[Regulations for take-off of May, June, and July, 1918.]

Maximum prices for special reselections of packer steers and cows for belting, carriage, furniture, or harness leather purposes are 1 cent over the maximums for regular selections and grades.

Beginning June 1 take-off all small packers, abattoirs, and wholesale butchers are governed by standard packer selections, and shall make the same grades, selections, and tare as standard packers make. Their maximum prices shall be relative to best standard packer maximum prices, and shall be based on Chicago freight. Chicago freight basis in States of California, Washington, Oregon, and Nevada means that the seller shall deduct $\frac{3}{4}$ cent per pound (being three-fourths of present freight East, which is 1 cent) from the invoice, or take this amount into consideration when naming his selling price. In all other States "Chicago freight basis" means that the seller allows the buyer any excess freight on shipment over the amount which could be charged on such shipment were it shipped from Chicago, and if freight charged from point of shipment does not exceed that from Chicago, no allowance is made, neither is any allowance made if the freight is less than from Chicago.

Transactions at a flat price in packer, abattoir, and wholesale butcher hides of May, June, and July take-off shall be operative for the May hides only. Beginning June 1 the flat prices shall be adjusted to graded and selected basis, taking into consideration Chicago freight.

Tanners are not permitted to buy green or slack-cured stock of butchers (excepting packers, abattoirs, and wholesale butchers), unless at 20 per cent less on hides and kips and $12\frac{1}{2}$ per cent less on skins than the maximum green salted prices.

Tanners are not permitted to buy green salted hides, kips, or skins of a butcher in less than carload lots at a higher price than 10 per cent less than the maximum green salted prices.

Packer, abattoir, and country coast (California, Oregon, Washington, and Nevada) hides shall first be offered to coast tanners having Government contracts, and those tanners, if they wish to buy the hides, must give decision within 48 hours after receipt of the offering.

Small packer, abattoir, and wholesale butcher hides, which have been resalted, shall be so described when offered for sale.

The maximum prices on Canadian packer hides are to correspond with domestics of similar merit and description ("Canadian hides" embrace those from other North American British possessions).

Hawaiian hide prices are ex-store San Francisco, usual quality, and selection.

For the take-off of August, September, and October the regulations were essentially the same as those governing the May, June, and July take-off with the following modifications:

Any resalted packer, abattoir, or wholesale butcher calfskins shall sell at relatively less than the price of 44 cents, which is for first salt standard packer stock on Chicago freight basis.

A go-between can not charge a brokerage to both buyer and seller. No one owning a lot of hides or skins can charge his customer a brokerage when selling same. Any tanner may pay an agent a brokerage for buying hides or skins (except on hides or skins which the agent owns himself), but such agent may not buy less than carload lots of butchers at a higher price than 10 per cent under applicable maximum prices. No brokerage shall exceed 2 per cent.

The prices on packers bulls are now on a selected basis, whereas formerly they were on a flat basis.

The modifications in general regulations for the November, December, and January, 1919, take-off are as follows:

All first salt hides and kips of small packers, abattoirs, wholesale butchers, and also good lots of city and country butchers, of standard packer pattern,

trim and conditions, containing not over 7 per cent No. 2's for cuts, may be governed by standard packer prices, Chicago freight basis. Any excess over 7 per cent No. 2's for cuts in such lots shall go at the No. 2 country price. Standard packer grading, selection, and tare shall govern. Chicago freight basis in States of California, Washington, Oregon, Nevada, Idaho, and Utah means that the seller shall deduct three-fourths of a cent per pound from the invoice, or take this amount into consideration when naming his selling price. In all other States "Chicago freight basis" means that the seller allows the buyer any excess freight on shipment over the amount which could be charged on such shipment were it shipped from Chicago, and if freight charged from point of shipment does not exceed that from Chicago, no allowance is made, neither is any allowance made if the freight is less than that from Chicago.

The maximum price for resalted hides and kips as described in paragraph No. 1 shall be 5 per cent less than the maximum for such first salt hides and kips.

The maximum prices for resalted packer, abattoir or wholesale butcher, calfskins shall be 5 per cent less than the maximum for such first salt calfskins.

Maximum prices for special reselections of packer steers and cows for belting, carriage, furniture, or harness leather purposes are 1 cent over the maximums for regular selections and grades. The premium of 1 cent per pound over the maximum allowed for special reselection of packer steers and cows is only permissible as follows:

(a) When native steers 60 pounds and up are graded for weights 60 to 65 pounds and 65 pounds and up.

(b) No. 1 native steers 50 to 60 pounds and 60 pounds and up, free of grubs when every hide is grubbed.

(c) No. 1 heavy native cows, free of grubs when every hide is grubbed.

(d) No. 1 light native cows, free of grubs when every hide is grubbed.

(e) Plump narrow hides picked out of native steers, 60 pounds and up.

(f) Spready hides picked out of native steers, 60 pounds and up.

It shall not be permissible to exceed the maximum prices by paying relatively more than same for green or slack-cured weight.

DOMESTIC PACKER HIDES.

Description.	Stocks and take-off to and including Apr. 30, 1918.	Take-off for—			
		May, June, and July.	August, September, and October.	November and December.	January, 1919.
Heavy native steers, No. 1.....	\$0.29	\$0.33	\$0.30	\$0.29	\$0.28
Heavy native steers, spready, No. 1.....	.30	.34	.31	.30	.29
Light native steers, No. 1.....	.28	.32	.29	.28	.27
Extreme light native steers, No. 1.....	.21	.25	.24	.23	.22
Heavy butt-branded steers, No. 1.....	.26½	.31	.28	.27	.26
Light butt-branded steers, No. 1.....	.25½	.30	.27	.26	.25
Extreme light butt-branded steers, No. 1.....	.25			.22	.21
Heavy Colorado steers, No. 1.....	.25½	.30	.27	.26	.25
Light Colorado steers, No. 1.....	.24½	.29	.26	.25	.24
Extreme light Colorado steers, No. 1.....	.23			.22	.21
Heavy Texas steers, No. 1.....	.29	.31	.28	.27	.26
Light Texas steers, No. 1.....	.26	.30	.27	.26	.25
Extreme light Texas steers, No. 1.....	.19	.25	.24	.23	.22
Branded cows, No. 1.....	.18½	.25	.23	.22	.21
Heavy native cows, No. 1.....	.24	.30	.28	.27	.26
Light native cows, No. 1.....	.21	.26	.24	.23	.22
Native bulls, No. 1.....	.20	.23	.21½	.20½	.19½
Branded bulls, No. 1.....	.18	.21	.19½	.18½	.17½
All Kosher, at ½ cent discount.					
Kips, No. 1.....		.27½	.27	.26	.25
Overweight kips, No. 1.....		.26	.25½	.24½	.23½
Branded kips, No. 1.....		.23	.22½	.21½	.20½
Calfskins, No. 1.....		.44	.44	.40	.40
Pacific coast—Oregon, Washington, California:					
Maximum price at shipping point—		May.			
Steers, flat.....	.25½	.29			
Cows, flat.....	.18	.24			
Hawaii:					
Honolulu—			Flat.		
Steers, 40 pounds and up.....	.32	.32	.30	.29	.29
Steers under 40 pounds and cows all weights.....	.26	.26	.25	.24	.24
Hilo and other packer hides—					
Steers.....			.26	.25	.25
Cows.....			.21	.20	.20

DOMESTIC COUNTRY HIDES.

Rules regarding the sale of country hides for the take-off of May, June, and July, 1918:

Dealers who accumulate hides, kips, and skins from various sections shall, when offering such merchandise, state where same originated and sell such merchandise of each section in accordance with the schedule of maximum prices applicable thereto. When various sections are sold all together as one lot the price shall be the price of the district and kind, according to the schedule, which commands the least.

The maximum prices in the schedule for country domestic green salted and dry hides are based on carload lots at point of shipment.

In country hides, sold on a selected basis, a hide with one grub is a grubby hide.

A butt-branded hide, in hides sold on a selected basis, is a No. 2.

The maximum price on black hides, special selection suitable for robes, is 23 cents flat.

Weights 25 to 50 pounds (not over 41 pounds average) are one-fourth cent less than weights 25 to 45 pounds of the same kind, excepting where the price for 45 to 60 is the same price as that for 25 to 45.

The designation of "mostly or practically free of grubs, but no mention for hair" is changed to "not over 15 to 20 per cent grubby."

Maximum prices on Canadian country hides are to correspond with domestics of similar merit and description. ("Canadian hides" embrace those from other North American British possessions.)

It is recommended that the practice of curing hides in vats be stopped.

When hides are sold to be free of ticks and not over 50 per cent ticky hides are found on a beam-house selection, the buyer will accept the ticky hides at not over the applicable maximum price of ticky hides, but if more than 50 per cent ticky hides are found on the beam-house selection, the entire lot must be billed at not over the applicable maximum price for ticky hides.

When sales are made of hides not over 15 to 20 per cent grubby and are found at destination to exceed 20 per cent grubby, the excess over 20 per cent up to 50 per cent shall be at the maximum price for grubby hides. If at destination the percentage of grubby is found to exceed 50 per cent, the seller shall bill the entire shipment at the maximum price for grubby hides.

The following modifications occur in the regulations for the take-off of August, September, and October:

Tanners are not permitted to buy green or slack-cured stock of butchers (excepting packers, abattoirs, and wholesale butchers) unless at 20 per cent less on hides and kips and 12½ per cent less on skins than the maximum green salted prices.

Tanners are not permitted to buy green salted hides, kips, or skins of a butcher in less than carload lots at a higher price than 10 per cent less than the maximum green salted prices.

All hides and skins must be bought and sold on a selected basis.

The general regulations regarding the sale of country hides for November, December, and January, 1919, follow:

All hides and skins must be bought and sold on selection. The actual selection must be made.

Dealers who accumulate hides, kips, and skins from various sections shall, when offering such merchandise, state where same originated and sell such merchandise of each section in accordance with the schedule of maximum prices applicable thereto. When various sections are sold all together as one lot the price shall be the price of the district and kind, according to schedule, which commands the least.

The maximum price on black hides, special selections suitable for robes is 1 cent over the regular maximum for the same grade.

No tanner is allowed to pay a brokerage or other compensation on country hides, kips, calf, goat or sheep pelts, dry or green salted, or on horsehides when the cost to the tanner, including such brokerage or other compensation, exceeds the prescribed maximum. A go-between can not charge a brokerage to

both buyer and seller. No one owning a lot of hides or skins can charge his customer a brokerage when selling same.

No dealer or tanner is allowed to buy less than carload lots within 5 per cent of maximum prices.

Domestic August, September, and October take-off hides, kips, calf and goat skins, and horsehides not sold on or before December 1 shall be governed by November and December prices. Domestic November and December take-off hides, kips, calf and goat skins, and horsehides not sold on or before February 1 shall be governed by January, 1919, prices.

Thirty-six thousand pounds of green salted hides and skins shall constitute minimum carload. Twenty thousand pounds dry hides and skins shall constitute minimum carload.

It shall not be permissible to exceed the maximum prices by paying relatively more than same for green or slack cured weight.

All the other regulations governing the sale of country hides are similar to the provisions of the August, September, and October maximum-price schedule.

DOMESTIC COUNTRY HIDES.

Description.	Stocks and take-off to and including Apr. 30, 1918.		Take-off for—			
	Grubby, long hair, poor season.	Not over 15 to 20 per cent grubby.	May, June, and July.	August, September, and October.	November and December.	January, 1919.
Best sections, such as Ohio and Middle West (including West Virginia and Pennsylvania):						
Extremes, 25 to 45 pounds, No. 1.....	\$0.19	\$0.21	\$0.22	\$0.22	\$0.22½	\$0.20½
Bufs, 45 to 60 pounds, No. 1.....	.18	.19	.22	.21	.20½	.19½
Heavy native steers, 60 pounds and up, No. 1.....	.20	.21	.23	.24	.23½	.22½
Light native steers, 50 to 60 pounds, No. 1.....	.18	.19		.23	.22½	.21½
Heavy native cows, 60 pounds and up, No. 1.....	.18	.19	.25½	.23	.22½	.21½
Bulls, all weights.....	.14	.15	.17			
Bulls, 60 pounds and up, No. 1.....				.17	.16½	.15½
Kips, 15 to 25 pounds, No. 1.....	.24	.27	.24	.24	.23½	.22½
Calf, 8 to 15 pounds, city first salt, equal to Chicago, No. 1.....				.44	.40	.40
Calf, outside, city.....	.37½	.38½	.38½			
Calf, country, No. 1.....	.34	.35	.34	.34	.34	.34
Ripe calf, 7 to 8 pounds.....	2.50	2.60	2.70	2.70	2.50	2.50
Deacons.....	2.30	2.40	2.50	2.50	2.30	2.30
Kansas, Illinois, Missouri, Iowa, Nebraska, Wisconsin, Minnesota, North and South Dakota (western North and South Dakota and Illinois not included in August, September, and October take-off):						
Extremes, 25 to 45 pounds, No. 1.....				.21½	.20½	.19½
Bufs, 45 to 60 pounds, No. 1.....				.20½	.19½	.18½
Heavy native steers, 60 pounds and up, No. 1.....				.23½	.22½	.21½
Light native steers, 50 to 60 pounds, No. 1.....				.22½	.21½	.20½
Heavy native cows, 60 pounds and up, No. 1.....				.22½	.21½	.20½
Bulls, 60 pounds and up, No. 1.....				.16½	.15½	.14½
Kips, 15 to 25 pounds, No. 1.....				.23½	.22½	.21½
Calf, 8 to 15 pounds, city first salt, equal to Chicago, No. 1.....				.44	.40	.40
Calf, country, No. 1.....				.34	.34	.34
Light calf, 7 to 8 pounds.....				2.70	2.50	2.50
Deacons.....				2.50	2.30	2.30
Southeastern hides (Kentucky to Florida and Maryland to Mississippi and Louisiana east of Mississippi, but excluding West Virginia):						
Ticky—	Flat.	Flat.	Flat.			
Extremes, 25 to 45 pounds.....	.14	.16	.18½			
Bufs, 45 to 60 pounds (or 45 and up).....	.14	.16	.18½			
Bulls.....	.12	.14	.15			
Kips, 15 to 25 pounds.....	.14	.16	.19			
Calf, 15 pounds and down.....	.24	.24	.30			

DOMESTIC COUNTRY HIDES—Continued.

Description.	Stocks and take-off to and including Apr. 30, 1918.		Take-off for—			
	Grubby, long hair, poor season.	Not over 15 to 20 per cent grubby.	May, June, and July.	August, Septem- ber, and October.	November and December.	January, 1919.
Southeastern hides—Continued.						
Free of ticks—	<i>Select.</i>	<i>Select.</i>	<i>Select.</i>			
Extremes, 25 to 45 pounds.....	\$0.18½	\$0.20½	\$0.21½			
Bufs, 45 to 60 pounds.....	.16½	.17½	.21½			
	<i>Flat.</i>	<i>Flat.</i>	<i>Flat.</i>			
Native bulls.....	.13	.15	.17			
Branded bulls.....	.12	.14	.15			
Kips, 15 to 25 pounds.....	.18	.20	.21½			
Calf.....	.31½	.31½				
Kentucky, Tennessee, Maryland, North Carolina, Virginia, District of Columbia:						
Extremes, 25 to 45 pounds, No. 1.....				\$0.21½	\$0.20½	\$0.20
Bufs, 45 to 60 pounds, No. 1.....				.20½	.19½	.19
Bulls, 60 pounds and up, No. 1.....				.16½	.15½	.15
Kips, city and country, No. 1.....				.23½	.22½	.23
Calf, 8 to 15 pounds, city first salt equal to Chicago, No. 1.....				.44	.40	.40
Calf, country, No. 1.....				.34	.30	.30
Light calf, 7 to 8 pounds.....				2.70	2.50	2.50
Deacons.....				2.50	2.30	2.30
Ticky hides, kips, and skins at 2 cents per pound less than free of ticks.						
Florida, Alabama, Mississippi, Georgia, South Carolina, Louisiana east of Mis- sissippi River:						
Ticky hides—						
Extremes, 25 to 45 pounds or 30 to 45 pounds, No. 1.....				.19½	.18½	.18
Bufs, 45 pounds and up, No. 1.....				.18½	.17½	.17
Bulls, 60 pounds and up, No. 1.....				.15½	.14½	.14
Kips, 15 to 25 pounds or 15 to 30 pounds, No. 1.....				.20½	.19½	.19
Calf, city first salt, No. 1.....				.41	.37	.37
Calf, country, No. 1.....				.31	.30	.30
Free of ticks, 2 cents per pound more.						
Texas, Oklahoma, Arkansas, Louisiana, west of Mississippi River:						
Extremes, 25 to 40 pounds or 25 to 45 pounds, No. 1.....	<i>Flat.</i>	<i>Flat.</i>	<i>Flat.</i>	.20½	.19½	.19
Bufs, 40 or 45 pounds and up, No. 1...	.15	.18	.19½	.19½	.18½	.18
Native bulls.....	.14	.18	.19½			
Native bulls, 60 pounds and up.....	.13	.15	.17			
Bulls, 60 pounds and up, No. 1.....				.17		
Branded bulls.....					.14½	.14
Branded bulls, 60 pounds and up.....	.12	.14	.15			
Kips, 15 to 25 pounds, No. 1.....	.16½	.19	.21½	.15		
Calf, 15 pounds and down, No. 1.....	.24	.24	.30	.21½	.20½	.20
				.32	.30	.30
Western parts of North and South Dakota:						
Country branded hides.....	.15	.16	.16			
Bulls.....	.12	.14	.15			
Bulls, 60 pounds and up.....				.15		
Hides, 25 pounds and up, side, branded				.17		
Hides, 25 pounds and up, unbranded (except butt branded, which are classed as No. 2).....				.20		
Kips, G. S. branded States.....	.20½	.22½	.20½	.21		
Kips, 15 to 25 pounds.....	.15½	.16½	.19½			
Native, unbranded hides.....				.38½		
Calf, city and country.....						
Colorado, Wyoming, Montana (including Utah for May, June, July):						
Country branded hides.....	.15	.16	.16			
Bulls.....	.12	.14	.15			
Bulls, 60 pounds and up.....				.15		
Kips, G. S., branded States.....	.20½	.22½	.20½			
Kips, 15 to 25 pounds, No. 1.....	.15½	.16½	.19½	.21	.20½	.19½
Native, unbranded hides.....						
Hides, 25 pounds and up, side branded.....				.17		
Hides, 25 pounds and up, unbranded (except butt branded, which are classed as No. 2).....				.20		

DOMESTIC COUNTRY HIDES—Continued.

Description.	Stocks and take-off to and including Apr. 30, 1918.		Take-off for—			
	Grubby, long hair, poor season.	Not over 15 to 20 per cent grubby.	May, June, and July.	August, September, and October.	November and December.	January 1919.
Colorado, Wyoming, Montana—Con.	<i>Flat.</i>	<i>Flat.</i>	<i>Flat.</i>			
Calf, city and country, No. 1.....				\$0.38½	\$0.35	\$0.35
Bufs, 45 pounds and up, No. 1 (no selections for brands).....					.17½	.17
Extremes, 25 to 45 pounds, No. 1 (no selection for brands).....					.18½	.18
California, Oregon, Washington, Nevada, Idaho, and Utah after July:						
30 to 50 pounds.....	\$0.14	\$0.15½	\$0.18½			
Over 50 pounds.....	.15	.16½	.20			
Steers, 50 pounds and up, No. 1.....				.23	.22½	.21½
Cows, 60 pounds and up, No. 1.....				.22	.21½	.20½
Extremes, 30 to 45 pounds, No. 1.....				.21	.20½	.19½
Bufs, 45 pounds and up, No. 1.....				.20	.19½	.18½
Native bulls, 60 pounds and up, No. 1.....	.13	.15	.17	.17	.16½	.15½
Bulls, branded, 60 pounds and up, No. 1.....	.12	.14	.15	.15	.14½	.13½
Kips, 15 to 30 pounds, No. 1.....	.23	.25	.23	.23	.22½	.21½
Calf, partly trimmed.....	.31	.31	.37			
California, Nevada, and Utah cities and countries.....					.36	.36
Calf, Portland, and Seattle, trimmed.....	.32	.32	.39			
Calf, short trimmed.....				.43		
Oregon, Washington, and Idaho; cities and countries.....					.40	.40
Calf, long trimmed.....				.39		
Arizona and New Mexico.....	.15	.17	.18			
Hides, weights 25 pounds and up.....				.19		
Extremes, 25 to 45 pounds No. 1.....					.19½	.19
Bufs, 45 pounds and up, No. 1.....					.18½	.18
Bulls, 60 pounds and up, No. 1.....					.14½	.14
Native bulls, 60 pounds and up.....				.17		
Branded bulls, 60 pounds and up.....				.15		
Kips, 15 to 25 pounds, No. 1.....				.21½	.20½	.20
Calf, 15 pounds down, No. 1.....				.32	.30	.30
No selection for brands on November, December, and January, 1919, take-off.	<i>Select.</i>					
Dry hides, 16 pounds and up.....	.35			.35	.34	.34
Bulls two-thirds price and glue half-price after July.	<i>Flat.</i>					
7 to 16 pounds.....	.39					
Kips, 7 to 16 pounds, glue out.....				.39	.37	.37
Calf.....	.45					
Calf, under 7 pounds, glue out.....				.45	.43	.43
New England hides (Maine, Vermont, New Hampshire, Massachusetts, New York, Connecticut, Rhode Island, and Delaware and New Jersey after July):						
Extremes, 25 to 45 pounds, No. 1.....	.18	.19	.21	.21	.20½	.20
Bufs, 45 pounds and up, No. 1.....	.16	.17	.21	.20½	.19½	.19
Heavy steers.....	.17	.18	.27			
60 pounds and up, No. 1.....				.23	.22½	.21
Heavy cows.....	.16	.17	.24			
60 pounds and up, No. 1.....				.22	.21½	.20½
Bulls.....	.14	.15	.16			
60 pounds and up, No. 1.....				.16	.15½	.14½
Kips, including grassers, No. 1.....	.23	.24	.25	.24	.23½	.22½
Hawaii, Honolulu:						
30 to 50 pounds.....			.18½	.18½	.17½	.17½
50 pounds and up.....			.20	.20	.19	.19
Stocks and take-off to and including Apr. 30, 1918, 30 to 50 pounds, \$0.18½.						
Stocks and take-off to and including Apr. 30, 1918, 50 pounds and up, \$0.20.						

CALFSKINS.

The maximum prices set on large city first-salt skins, outside city skins, and country skins do not apply to the Pacific coast.

Other eastern trimmed calfskins not equal in all respects to New York city skins shall sell at relatively less, according to their value. Nobody shall be allowed to give the butcher a bonus because this practice is construed to mean paying more than the maximums.

DOMESTIC CALFSKINS (NOT OTHERWISE PROVIDED FOR).

Description.	Stocks on hand May 1 and take-off for May, June, and July.	Take-off for—	
		August, September, and October.	November, December, and January, 1919.
Chicago city first-salt calfskins and other large city first-salt calfskins.	\$0.44	\$0.44	\$0.40
Light calf, 7 to 8 pounds.....	3.17	3.30	2.95
Deacons.....	2.97	3.10	2.80
New York City trimmed calfskins and other eastern city trimmed calfskins equal in all respects to New York City:			
4 to 5 pounds.....	3.10	3.10	2.90
5 to 7 pounds.....	4.00	4.00	3.60
7 to 9 pounds.....	5.00	5.00	4.50
9 to 12 pounds.....	6.00	6.00	5.40
12 to 17 pounds.....	7.00	7.00	6.50
17 to 25 pounds.....	7.50	7.50	6.50
Buttermilk calf.....	1.25	1.25	1.15

¹ Per cent discount.

DOMESTIC PICKLED SHEEP AND LAMB SKINS.

STOCKS ON HAND MAY 1 AND TAKE-OFF FOR MAY, JUNE, AND JULY, 1918.

The schedule below is for all green salted packer and city butcher skins of strictly good take-off. All green salted country butcher and city butcher skins showing poor take-off shall be selected on the same basis, but the price shall be 3 cents per square foot less than price paid for the various grades of strictly good packer and city butcher take-off.

All pickled skins to be graded according to the following specifications, the grades to be identified by numbers.

Grade No.	Description.	Price.
1	Bull sheep: Super heavy, measuring over 120 square feet and weighing 45 pounds and over, per dozen.....	\$0.18
2	Heavy sheep: Heavy clear sheep, measuring over 110 square feet, per dozen.....	.18
3	Clear sheep: Sheep with clear, smooth, and sound grain, measuring over 100 square feet, containing no blind ribs, no ribby skins, and free from cockle.....	.14
4	Blind rib sheep: All sheepskins measuring over 100 square feet, having a blind rib, no ribby skins, or defective grain.....	.12
5	Ribby sheep: All other ribby sheep measuring over 75 square feet, no defective grain..	.11
6	No. 2 sheep: All sheep measuring over 100 feet rejected from 1, 2, 3, 4, and 5 grades, with poor and defective grain, value but not to exceed.....	.08
7	Prime lambs: All smooth, clear lambs, 65 to 100 square feet, inclusive, strictly good pattern; no blind rib or ribby skins; no open grain skins; no torn skins; absolutely free from cockle and pinny skins.....	.15
8	Blind rib lambs: All lambs containing a blind rib, strictly good pattern; no ribby skins and no damaged grain; no torn skins and no cockle; 75 to 100 square feet.....	.14
9	Ribby lambs: Lambskins showing ribby or open grain, cockle skins, and pinholes up to 75 square feet.....	.08
10	Small lambs: All lambskins 50 to 64 square feet, rejected from Nos. 7, 8, and 9 on account of size.....	Value.
11	Torn skins: All torn skins or badly out skins over 50 feet; all heated skins.....	Value.
12	Pieces and culls: All pieces and culls and torn skins under 50 feet; all heated skins....	Value.

DOMESTIC PICKLED SHEEP AND LAMB SKINS.

TAKE-OFF FOR NOVEMBER, DECEMBER, AND JANUARY, 1919.

The schedule below is for all green salted packer and city butcher skins of strictly good take-off. All green salted country butcher and city butcher skins showing poor take-off shall be selected on the same basis, but the price shall be 3 cents per square foot less than price paid for the various grades of strictly good packer and city butcher take-off.
All pickled skins to be graded according to the following specifications, the grades to be identified by numbers:

Grade No.	Description.	Present price.	Relative value.
1	Bull sheep: Super heavy clear sheep measuring over 120 square feet.....	\$0.18	\$0.18
2	Heavy sheep: Heavy clear sheep measuring over 110 square feet.....	.16	.16
3	Clear sheep: Sheep with clear, smooth and sound grain, measuring over 100 square feet, containing no blind ribs, no ribby skins and free from cockle.	.14	.14
4	Blind rib sheep: All sheepskins measuring over 100 square feet having a blind rib; no ribby skins or defective grain; slight cockle.....	.12	.11
5	Ribby and cockley sheep: All other ribby sheep measuring over 100 square feet; slight grain damage and all cockle; skins not suitable for grade No. 4 permitted if otherwise sound.....	.11	.09
6	No. 2 sheep: All sheep rejected from 1, 2, 3, 4, and 5 grades, with poor and defective grain, value but not to exceed.....	.08	.07
7	Prime lambs: All smooth, clear, lambs 75 to 100 square feet, inclusive, strictly good pattern; no blind rib or ribby skins; no open grain skins; no torn skins; absolutely free from cockle and pinny skins.....	.15	.15
8	Blind rib lambs: All lambs containing a blind rib, strictly good pattern; no ribby skins, damaged grain or torn skins; slight cockle, 75 to 100 square feet.	.14	.13
9	Ribby and cockley lambs: Lambskins showing ribby or open grain; cockle skins and pinholes, 75 to 100 square feet.....	.09	.09
10	Small lambs: All lambskins under 75 square feet rejected from Nos. 7, 8, and 9 on account of size (relative value).....		
11	Torn skins: All torn skins or badly cut skins over 50 feet; all heated skins (relative value).....		
12	Pieces and culls: All pieces and culls, and torn skins under 50 feet; all heated skins (relative value).....		

All wool pelts taken off before November 1, when ready for sale in the pickle, may be sold at prices ruling as of August 1 to November 1, providing a suitable affidavit concerning the quantity and date of take-off is filed prior to November 5, giving inventory of all wool pelts on hand or in process November 1.
Imported pickled sheep or lamb skin pelts or pickled pelts reduced from imported wool skins to be sold at their value relative to the various kinds and selections as established above.
The number of square feet mentioned in the various paragraphs refers to square feet per dozen skins.
All country skins showing take-off equal to city butcher skins of equal take-off will receive the same prices that are allowed to city butcher skins.

HORSEHIDES.

General regulations.—All prices are f. o. b. shipping point, free of manes and tails.
Prices vary according to the section of the country and also with the differences in sizes and widths of butts or lengths of shanks.
For the November, December, and January, 1919, take-off certain modifications were made, as follows:
City renderers would mean only such hides as are actually taken off in a rendering establishment and a sworn affidavit executed by a notary must accompany each shipment. City renderers that are taken off in the States of Virginia, West Virginia, Tennessee, North and South Carolina, Georgia, Alabama, Florida, Mississippi, Arkansas, Missouri, Louisiana, Oklahoma, New Mexico, and Arizona, shall be classed as Southern horsehides and shall sell for \$6.25 for Nos. 1 and 2. Country horsehides from the above-mentioned States shall not sell to exceed \$6, including mules. Any dealer accumulating southern horsehides at points along the Missouri and Ohio Rivers must so designate as same and sell as such.

DOMESTIC HORSEHIDES.

Description.	Stocks on hand May 1, and take-off for May, June, and July.	Take-off for—	
		August, September, and October.	November, December, and January, 1919.
Whole horsehides:			
City renderers—			
Accompanied by affidavit.....	\$8.00		
Nos. 1 and 2.....		\$7.50	\$7.50
Ordinary cities and countries.....	\$6.75- 7.50		
Nos. 1 and 2.....		\$6.25- 7.00	\$6.25- 7.00
Southerns.....	6.00- 6.50		
Nos. 1 and 2.....		5.50- 6.00	6.25
Southern countries.....			6.00
Ponies and glues, half price.			
Headless hides (one that is trimmed off back of ears), 50 cents less.			

DOMESTIC HORSEHIDES—Continued.

Description.	Stocks on hand May 1, and take-off for May, June, and July.	Take-off for—	
		August, September, and October.	November, December, and January, 1919.
Colts.....		\$0.25-\$1.00	\$0.25-\$1.00
Horse fronts.....	\$5.75-\$6.25	4.75- 5.50	4.75- 5.50
No. 2 and headless horse fronts, 50 cents less.			
Butts:			
Green salted—			
Length, 15 to 18 inches.....	1.25- 1.40	1.15- 1.30	1.15- 1.30
Length, 18 to 20 inches.....	1.50- 2.00	1.75- 1.90	1.75- 1.90
Length, 20 to 22 inches.....	2.25- 2.50	2.15- 2.30	2.15- 2.30
Length, 22 inches and up.....	2.50- 3.15	2.75- 2.90	2.75- 2.90
No. 2 and short shanks, 25 cents less.			
Butts of different sizes and widths at relative prices.			

FOREIGN WET SALTED HIDES.

Regulations for the sale of stocks on hand May 1, 1918, and importations shipped up to and including July 31, 1918:

May, June, and July shipments of foreign short-haired hides taken off north of the Equator have maximum prices 10 per cent over maximum prices set. Hides on which the maximum prices are quoted weighed and delivered should, when bought on shipping weight, not cost relatively more than the New York weighed and delivered basis maximum.

Australian and New Zealand hides, having been inactive here for a long time, were given nominal maximums. If possibilities of actual business arise and are brought to the attention of the hide, leather, and tanning materials section the matter will be given proper consideration. A price for New Zealand meat works has been made below.

Mataderos: Kips, the weight (both range and average) varies, and may continue to do so according to custom.

All prices are quoted in cents per pound.

The following modifications occur in the regulations for the sale of the August, September, and October take-off:

All prices in Argentine gold are per 100 kilos f. o. b. ship, unless otherwise noted, and include export duty and lighterage, but salting on ship is for buyers' account. Copy of invoice covering each transaction will be required. No deviation may be made from these terms; no buyer shall assume the export duty and lighterage, even though the total cost comes within the maximum price.

For the take-off of November and December there were the additional regulations:

A go-between may not charge a brokerage to both buyer and seller. No one owning a lot of hides or skins may charge his customer a brokerage when selling same. Brokerage on foreign cattle hides and skins shall not exceed 2 per cent. The brokerage on foreign goatskins, sheepskins, and other skins (excepting cattle hides and skins) shall not exceed 3 per cent.

Shipments of dry kips under 12 pounds and dry salted kips under 15 pounds, when mixed with common dry hides (such as Bogota, Orinocos, Porto Cabellas, La Guairas, Central Americans, etc.) shall be sold at two-thirds the price of the hides, or rejected, at buyer's option. Shipments of dry kips under 14 pounds mixed with hides from Mexico, West Indies, and Peru shall be sold at two-thirds price, or rejected, at buyer's option.

The following schedules give the prices fixed by the price-fixing committee of the War Industries Board:

Description.	Stocks on hand May 1, 1918, and shipments from point of origin to and including July 31, 1918.	Remarks.
Buenos Aires frigorífico:		
Steers.....	\$0.31½	Shipping weight, c. i. f., New York basis.
Cows.....	.23	Do.
Montevideo frigorífico:		
Steers.....	.31½	Do.
Cows.....	.22	Do.
Buenos Aires city matadero well taken off:		
Steers.....	.26	Do.
Cows.....	.21	Do.

Description.	Stocks on hand May 1, 1918, and shipments from point of origin to and including July 31, 1918.	Remarks.
Argentine city matadero well taken off:		
Steers.....	90.24½	Shipping weight, c. i. f., New York basis.
Cows.....	.20	Do.
Argentine country matadero and campos:		
Steers.....	.19	Do.
Cows.....	.19	Do.
Paraguay country matadero and campos:		
Steers.....	.19	Do.
Cows.....	.19	Do.
Paraguay city matadero and campos:		
Steers.....	.20	Do.
Cows.....	.20	Do.
Montevideo city matadero:		
Steers.....	.25	Do.
Cows.....	.20	Do.
Buenos Aires matadero kips.....	.24	Do.
Montevideo matadero kips.....	.22	Do.
Argentine and Uruguay saladero:		
Steers.....	.29	Weighed and delivered New York basis.
Cows.....	.24	Do.
Rio Grande saladero:		
Steers.....	.29	Do.
Cows.....	.24	Do.
São Paulo frigorífico hides.....	.25	Do.
Rio Janeiro hides.....	.16	Do.
Bahia hides.....	.22	Do.
Pernambuco hides.....	.23	Do.
Minas hides.....	.16	Do.
Venezuela frigorífico hides.....	.27	Do.
Colon (commissariat) hides.....	.22	Do.
Colombia city hides.....	.24	Do.
Panama hides.....	.21	Do.
West Indian hides.....	.20	Do.
Guinea hides.....	.20	Do.
Havanas packers' hides.....	.22	Do.
Havanas specials hides.....	.21	Do.
Havanas regular hides.....	.20	Do.
Mexico city packers' hides.....	.24	Do.
Mexico city and neighborhood hides.....	.23	Do.
Vera Cruz hides.....	.22	Do.
Vera Cruz rastro hides.....	.25	Do.
Puebla hides.....	.23	Do.
Pachuca rastro hides.....	.22½	Do.
Orizaba hides.....	.22½	Do.
Gueretaro hides.....	.22½	Do.
Quadalajara hides.....	.23½	Do.
Oaxaca hides.....	.23½	Do.
Frontera hides.....	.21½	Do.
Tabasco hides.....	.21	Do.
Campeche hides.....	.21½	Do.
Laguna hides.....	.21½	Do.
Northern Mexican city hides.....	.22	Do.
Tampico hides.....	.21½	Do.
Progreso hides.....	.20	Do.
Chile (Valparaiso) hides.....	.24	Do.
Peru (Lima) hides.....	.25	Do.
China packers' (heavy) hides.....	.27	Do.
China packers' (light) hides.....	.25	Do.
Shanghai hides.....	.24	Do.
Queensland butchers' hides (nominal).....	.22	Do.
Australian meat works' hides (nominal).....	.26	Do.
New South Wales butchers' hides (nominal).....	.24	Do.
New Zealand hides (nominal).....	.26	Do.
Rangoon hides (nominal).....	.18	Do.
China buffalos' hides.....	.17	Do.
New Zealand meat works' hides:		
Steers.....	.27½	C. i. f. shipping weight 3 per cent shrinkage guaranteed.
Cows.....	.26½	Do.

Description.	Shipments from origin August, September, and October.	Shipments from origin November, December, and January, 1919.
Buenos Aires Frigorifico:		
Steers.....	\$53.00	\$51.00
Cows.....	40.00	44.00
Montevideo Frigorifico:		
Steers.....	53.00	61.00
Cows.....	40.00	44.00
River Plate Frigorifico type steers.....	¹ 48.50	¹ 58.00
River Plate Frigorifico type:		
Cows.....	¹ 36.00	¹ 43.00
Kips.....	¹ 38.00	¹ 47.00
Calf.....		¹ 28.50
Argentina and Uruguay Saladero steers.....	50.00	57.50
Argentina and Uruguay Saladero cows.....	36.50	40.00
Frigorifico type Chilians (Valparaiso) hides.....	¹ .25	
Habana and Santiago regular hides.....	¹ .20	
Argentine City special Matadero steers.....		¹ .28 ¹ / ₂
Argentine City special Matadero cows.....		¹ .20 ¹ / ₂
Buenos Aires and Montevideo Frigorifico kips, 15 to 25 pounds.....		49.00
Buenos Aires and Montevideo Frigorifico kips, not over 32 pounds, average.....		47.00
Buenos Aires and Montevideo Frigorifico bulls.....		42.00
Morris & Co., San Salvador hides.....	(⁶)	(⁶)
Swift & Co., Asuncion hides.....	(⁶)	(⁶)
Montevideo City Matadero:		
Steers.....		¹ .28 ¹ / ₂
Cows.....		¹ .23
Kips.....		
Extremes.....		¹ .23
Buenos Aires and extremes.....		¹ .22
Rio Grande Saladero:		
Steers.....		56.50
Cows.....		40.00
Sao Paulo Frigorifico hides.....		3.26 ¹ / ₂

¹ 10 per cent shrinkage guaranteed.
² 10 per cent shrinkage.
³ Weighed and delivered at New York.

⁴ C. and f. New York or Boston.
⁵ Price shall be relative to regular Frigorificos.

FOREIGN HORSEHIDES.

Description.	Take-off for November and December, 1918.
Chile and Buenos Aires City G. S. hides:	
Not under 25 kilos average and free of ponies, colts, and glues.....	¹ \$7.50
(Headless and seconds, 50 cents less.)	
Chile and Buenos Aires Province or Campos:	
About 18 to 20 kilos, average and free of ponies, colts, and glues.....	¹ 5.75
All China dry horsehides:	
No. 1's, about 16 to 17 pounds, average.....	3.50
No. 1's, about 12 to 13 pounds, average.....	2.75
No. 1's, about 10 pounds, average.....	2.50
(No. 2's, 50 cents less.)	
(No. 3's, half price.)	

¹ C. and f., shipping weight.

FOREIGN DRY HIDES.

Regulations for the sale of hides included in the original regulations for May, June, and July, 1918:

May, June, and July shipments of foreign winter haired dry hides, taken off south of the Equator, have maximum prices 10 per cent over the maximum prices set.

(Cordova (Argentina) dry hides include hides from Salta, Santiago del Estero, and Metan.

Maximum price of inservibles shall not be over 50 per cent of the maximum price of the best selection of the same kind.

Maximum price on all dry salted hides is 6 cents less than dry flint in all cases where it has been customary to sell lots running all or practically all dry salted, and in such cases the hides with pickle on them are 3 cents under dry flints. In other cases the customary conditions prevail.

The percentages of desechos mentioned in Argentine and Uruguay dry hides do not apply to kip and calf. Kip and calf are free of mal-desechos and are inservibles.

Venezuela, Colombia, Ecuador, Central America, West Indies, San Domingo, Haiti, and Porto Rico kip, maximum price 1 cent per pound over maximum price for hides of the respective countries; calf, maximum price 6 cents over the maximum price for hides of the respective countries.

Bogota Mount slaughterhouse hides accompanied by a statement sworn to before United States consul or consular agent that they are slaughterhouse hides, such statement to be attached to invoice to United States buyer of hides to have a maximum price of 1 cent more than the maximum price ruling on Mount Bogotas.

Guayaquil slaughterhouse hides accompanied by statement sworn to before a consul or consular agent that they are slaughterhouse hides, such statement to be attached to invoice to United States buyer. Maximum price to be 33½ cents for dry.

All prices are quoted in cents per pound.

The schedule of maximum prices on hides and skins for August, September, and October, 1918, contains a full list of hides of this class. In general it may be said that prices vary from the lowest prices for West Indian dry hides to the highest for Cordovan dry hides.

Modifications of terms of sale for this period follow:

When prices are on basis of New York weights, original selection, the certified arrival weights shall govern.

When prices are on the basis of c. i. f. or c. and f. on original shipping weights, the customary shrinkage guarantees shall govern, unless otherwise specified.

Cordova (Argentina) dry hides shall include Santiago del Estero, San Luis, Salta, and Metan.

Maximum price on all dry salted hides is 6 cents less than dry flint in all cases where it has been customary to sell lots running all or practically all dry salted, and in such cases the hides with pickle on them are 3 cents under dry flints. In other cases the customary conditions prevail.

Maximum price of inservible hides shall not be over two-thirds of the maximum price for hides of the basis selection of the same kind.

Venezuela, Colombia, Ecuador, Central America, West Indies, San Domingo, Haiti and Porto Rico kip, maximum price 1 cent per pound over maximum price for hides of the respective countries; calf, maximum price 6 cents over the maximum price for hides of the respective countries.

Prices quoted are cents per pound.

The prices for November and December remain unchanged.

FOREIGN DRY HIDES.

Description.	Stocks and shipments from origin, to and including July 31, 1918.	Remarks.
Becerritos.....	\$0.54	C. and f., New York or Boston.
Buenos Aires, W. H., 30 per cent desechos:		
Hides.....	.34	Do.
Kips.....	.43½	Do.
Calf.....	.56	Do.
Cordova, W. H., 15 per cent desechos:		
Hides.....	.37	Do.
Kips.....	.46	Do.
Santa Fe, W. H., 15 per cent desechos:		
Hides.....	.34	Do.
Kips.....	.40	Do.
Corriente, W. H., 15 per cent desechos:		
Hides.....	.32	Do.
Kips.....	.36	Do.
Entre Rios, W. H., 15 per cent desechos:		
Hides.....	.34	Do.
Kips.....	.40	Do.
Concordia, W. H., 15 per cent desechos:		
Hides.....	.34½	Do.
Kips.....	.40	Do.
Montevideo, W. H., 15 per cent desechos:		
Hides.....	.35½	Do.
Kips.....	.42	Do.
Calf.....	.54	Do.
Paraguay, W. H., 15 per cent desechos:		
Hides.....	.30	Do.
Kips.....	.34	Do.
Upper Parana, 15 per cent desechos, hides.....	.33	Do.
Brazil, W. H., Rio Grande No. 1 selection:		
Hides.....	.34	Do.
Kips.....	.36	Do.
Cuyuba, No. 1 selection, hides.....	.33	Do.
Matto Grosso, No. 1 selection, hides.....	.33	Do.
Bahia, hides.....	.34½	New York delivery and selection.
Pernambuco, hides.....	.34½	Do.
Ceara, hides.....	.37	Do.
Parnahyba, hides.....	.37	Do.
Minas (Rio Janeiro), hides.....	.30	Do.
Venezuela, Orinoco, hides.....	.33½	Do.
Puerto Cabello and La Guayra, hides.....	.32½	Do.
Colombia, Mount Bogota, hides.....	.32½	Do.
Ambata and Latacunga, hides.....	.31½	Do.

FOREIGN DRY HIDES—Continued.

Description.	Stocks and shipments from origin, to and including July 31, 1918.	Remarks.
Guayaquil cities (excepting slaughterhouse), hides ..	\$0.31	New York delivery and selection.
Guatemala city, hides .....	.35	Do.
Guatemala country, hides .....	.34	Do.
Honduras, hides .....	.32	Do.
Honduras Ampala, hides .....	.33	Do.
San Salvador, hides .....	.33	Do.
Nicaragua, hides .....	.32	Do.
Costa Rica, hides .....	.32	Do.
Panama, hides .....	.32	Do.
Ecuador:		
Mount Quito, hides .....	.33	Do.
Mountain, hides .....	.29	Do.
Coast, hides .....	.25	Do.
Peru:		
Hides .....	.32	Do.
Kips (flat, free of glue) .....	.38	Do.
Bolivia:		
Hides, trimmed .....	.34	Do.
Hides, untrimmed or partly trimmed .....	.55	Do.
West Indian, San Domingo, Haiti, hides .....	.29	Do.
Porto Rico, hides .....	.31	Do.
Mexico:		
Northern—		
Hides .....	.33	New York freight, selection as customary.
Kips .....	.39	Do.
Calf (free of glue) .....	.45	Flat, New York basis.
Pueblo, San Geronimo, and west coast, hides .....	.54	Do.
Chihuahua, hides .....	.34	New York freight, selection as customary.
Java, shaved, best quality and selection:		
About 1 to 6 pounds (about 2 kilos average) .....	.75	C. and f.
About 6 to 10 pounds (about 3½ kilos average) .....	.68	Do.
About 10 to 15 pounds (about 6 kilos average) .....	.62	Do.
Rangoon, arsenicated:		
Calf .....	.40	Do.
Calf, 6 to 10 pounds average .....	.36	Do.
Calf, 12 to 16 pounds average .....	.32	Do.
Dry salted, 16 to 20 pounds average .....	.26	Do.
Cape of Good Hope and South Africa:		
Best selection .....	.34	Do.
Best selection, dry salted .....	.32	Do.
Nigeria:		
Hides, first selection .....	.26	Do.
Kips, excluding glue .....	.26	Flat, c. and f.
Calf, excluding glue .....	.31	Do.
Madagascar:		
Best selection .....	.30	C. and f.
Dry salted .....	.20	Do.
Mombassa:		
Hides and kips .....	.30	Do.
Calf .....	.35	Do.
Abyssinian:		
Hides and kips .....	.30	Do.
Calf .....	.35	Do.
Soudan:		
Hides and kips .....	.28	Do.
Calf .....	.33	Do.
BUFFALOES.		
East India, winter season:		
Commissariat slaughters	13d	Do.
Dacca slaughters	8d	Do.
Rangoon, winter season:		
First selection, dry	\$0.20	Do.
Dry salted .....	.16	Do.
Trimmed and shaved .....	.33	Do.
Java, best season:		
Trimmed and shaved .....	.36	C. i. f. and war risk for first selection.
China, winter season:		
Trimmed and shaved .....	.35	Do.
Arsenicated .....	.21	Do.
Dry salted .....	.17	Do.
China, Hongkong:		
Shaved .....	.31	Do.
Dry .....	.17	Do.
Dry salted .....	.14	Do.

FOREIGN DRY HIDES—Continued.

Description.	Shipment from origin, August, September, and October.	Remarks.
BUFFALOES.		
West Indies:		
Santo Domingo and Haiti—		
Dry flint hides.....	\$0.29	New York delivery and selection.
Dry salted, flat.....	.25	Do.
Cordova, W. H., 15 per cent desechos:		
Hides.....	.37	C. and f., New York or Boston.
Kips.....	.46	Do.

Description.	Stocks and shipments from origin, to and including July 31, 1918.						
	1 to 6 pounds.	6 to 10 pounds.	10 to 14 pounds.	14 to 20 pounds.	20 to 24 pounds.	24 to 30 pounds.	30 and up pounds.
China:							
Hankow, B. S. W. H. (2's 6 cents less)....	\$0.55	\$0.48	\$0.48	\$0.46	\$0.44	\$0.42	\$0.40
Shanghai, B. S. W. H. (2's 6 cents less)....	.54	.47	.47	.45	.43	.41	.39
Hongkong, original run, flat.....	.36	.33	.33	.32	.31	.....	.....
Thibet, B. S. W. H. (2's 6 cents less).....	.45	.37	.37	.35	.33	.30	.30
Neuchwang, B. S. W. H. (2's 6 cents less)....	.45	.37	.37	.35	.33	.30	.30
Mongolia, B. S. W. H. (2's 6 cents less)....	.45	.37	.37	.35	.33	.30	.30

Above prices are c. i. f. and war risk.

	Shipment from origin, August, September, October.						
	1-6 pounds.	6-10 pounds.	10-14 pounds.	14-20 pounds.	20-24 pounds.	24-30 pounds.	30-up. pounds.
China:							
Hankow, B. S. W. H. (2's 6 cents less)....	\$0.53	\$0.48	\$0.48	\$0.46	\$0.44	\$0.42	\$0.40
Shanghai B. S. W. H., same trim as Hankow (2's 6 cents less).....	.52	.47	.47	.45	.43	.41	.....
Hongkong, original run, flat.....	.36	.33	.33	.32	.31	.....	.....
Canton, shaved.....	.69	.62	.56	.....	.....	.....	.....
Tibet, Neuchwang, Mongolia, B. S. W. H. (2's 6 cents less).....	.45	.37	.37	.35	.33	.30	.30

China prices are c. and f. New York.

CABRETTA AND SHEEPSKINS.

Description.	Stocks on hand May 1, 1918, and shipments from origin, to and including July 31, 1918.	Remarks.
Brazils.....	\$1.20	Per piece, landed basis New York.
Punjab:		
700 pounds average for 500 skins.....	7.00	Per dozen.
Each 100 pound additional.....	.50	Per dozen more.
China sheepskins, basis 2½ pounds average.....	15.00	Per dozen.
Java sheepskins, basis 1½ pounds average.....	11.00	Do.
West Indians, 1 pound to 1½ pounds.....	.65-1.00	Flat, per piece.
Peruvian slats, ¾ pound to 1 pound.....	2.50-4.00	Per dozen, according to quality and weight.
Cape Town gloves, basis first heavies.....	2.20	Per skin.
(Lower grades and weights in proportion.)		

CABRETТА AND SHEEPSKINS—Continued:

Description.	Stocks on hand May 1, 1918, and shipments from origin, to and including July 31, 1918.	Remarks.
Spanish lambskins: Basis, first wool, 12 to 13 kilos, Catalonian primes..... (Other weights and grades in proportion.)	\$21.00	Per dozen.
Oriental lambs, basis 95 to 100 kilos.....	13.50	Do.
Black-head Mocha sheepskins: Average No. 1, 200 to 210 pounds..... Average No. 1, 170 pounds..... Average No. 1, 140 pounds..... Average No. 1, 125 pounds..... Average No. 1, 110 pounds..... Average No. 1, 95 pounds..... (All seconds at two-thirds price.)	2.00 1.70 1.40 1.15 1.00 .85	Per skin. Do. Do. Do. Do. Do.
White heads: Average No. 1, 225 pounds..... Average No. 1, 179 to 180 pounds..... Average No. 1, 140 to 150 pounds..... Average No. 1, 120 to 125 pounds..... (All seconds at one-half price.)	1.60 1.15 .90 .65	Do. Do. Do. Do.
Mombassa sheepskins; No. 1, 150 to 160 pounds average. (Seconds at $\frac{1}{2}$ price.)	.80	Per skin.
Mombassa shade dried..... (Seconds at $\frac{1}{2}$ price.)	1.00	Do.
Red Head Mocha sheepskins: Average No. 1, 160 to 170 pounds..... Average No. 1, 140 to 150 pounds..... Average No. 1, 115 to 120 pounds..... (Seconds at $\frac{1}{2}$ price.)	.90 .70 .40	Do. Do. Do.
Description.	Shipments from point of origin, August, September and October.	Remarks.
Brazil, banded, bans, over 2 pounds, heavies, regular primes.	\$1.30	Each.
Punjab: Sheep pelts, 400 pounds average for 500 skins.... Wool sheep, 1,500 pounds average for 500 skins...	7.00 13.50	Per dozen. Do.
Madras and southern India sheep: Basis, 85 per cent primes; 15 per cent seconds, average about 185 to 200 pounds.	11.00	Do.
West Indies sheepskins; basis $\frac{1}{2}$ to 1 $\frac{1}{2}$ pounds average.	\$0.65-1.00	Each.
Spanish lambskins, first wool, second wool, 13 to 14 kilos: Basis, Catalonian primes..... 18 to 19 kilos..... 13 to 14 kilos..... 8 to 9 kilos.....	21.00 23.00 21.00 19.00	Per dozen. Do. Do. Do.
Macedonian lambskins: Average about— 95 to 100 kilos..... 80 to 90 kilos..... 70 to 80 kilos..... 60 to 70 kilos..... 50 to 60 kilos.....	13.00 12.25 11.75 11.00 9.00	Do. Do. Do. Do. Do.
Grecian lambskins: Average about— 95 to 100 kilos..... 80 to 90 kilos..... 70 to 80 kilos..... 60 to 70 kilos..... 50 to 60 kilos.....	14.00 13.25 12.75 12.00 10.00	Do. Do. Do. Do. Do.
Prime Macedonian and Grecian sheepskins and Kavlaks, average over 140 kilos.	18.00	Do.

GOATSKINS.

The prices on goatskins, as given in the following schedule of May 1, 1918, were continued in force through December, 1918, without change:

Angoras, straight	\$0.42½
Angoras, light crossbred	.50
New Mexico, No. 1	.75
Navaho, No. 1	.85
(No. 2's, kids and bulls, two-thirds price.)	
Domestic skins	¹ 12.00-15.00
Packers	¹ 18.00
Mexico:	
Oaxacas, flat (\$0.90 per pound)	² 1.65
Pueblas, flat (\$0.85 per pound)	² 2.00
Matanzas, flat (\$0.80 per pound)	² 2.25
Frontiers, selected (\$0.75 per pound)	² 1.75
West Indies:	
Jamaicas, flat	² .85
Porto Plata, flat	² .65
Haitians, flat	² .65
Colombia, Bogoto, selected	1.00
Venezuela:	
Barquiseметas, flat	.55
Coros, flat	.50
Rio Hache, flat	.45
Islands, flat	.43½
Maracalbos, flat	.42½
La Guayras, flat	.41½
Brazil:	
Brasils	² 1.30
For 110 average New York, with specials	⁴ .05
Heavies, 20 per cent less than firsts.	
Bulls, light and seconds, two-thirds price of firsts.	
Bahias, on basis of 2½ cents less per pound.	
Argentines:	
Cordobas (50 per cent Matadores and 50 per cent Campos), 9½ to 10 K., \$0.85 for firsts; seconds, two-thirds price.	
Santiago, same price as Cordobas.	
Metans, 9½ to 10 K, 10 cents less	.75
San Luis, 10 K, 10 cents less	.75
Saltas, 10 K	.70
Bahia Blancas, 11 to 12 K	.60
Pampas (Buenos Aires Provinces), 11 to 12 K	.62½
Cordobas kidskin	per dozen.. 3.50
Seconds, two-third price.	
Chilians:	
Chile kidskins	do.... 3.50
Seconds, two-thirds price.	
Peru:	
Paytas, dry salted, selected basis	per pound.. .65
Peruvian goats (flint dry), flat basis	do.... .55
Piscos, dry salted, selected basis	do.... .55
Bolivia:	
Bolivians, flat basis	do.... .45
Africa:	
North Africans, no importations.	
Egypt, no importations.	
Capetown, basis prime extra lights	do.... .70
Algoah Bay, basis prime extra lights	do.... .65
Kafir, basis prime extra lights	do.... .55
Nigerian	per dozen.. 14.00
All primes free kids.	
Weight, pounds, \$1.30 per skin, lower qualities proportionately cheaper.	

	Firsts.	Seconds.	Thirds.	Average pounds.	Per dozen.
	Per cent.	Per cent.	Per cent.		
Abyssinians, flint dry flat	60	30	10	110	\$12.00
Harrars, flat	60	30	10	110	12.50
Dunkali, flat	10	75	15	90	9.00
Berberah, flat	50	40	10	110	13.00
Somali, flat	10	75	15	95	9.00
Hodeidahs, flat	60	30	10	120	11.00
Gizan and Gurnittah, flat	60	30	10	120	11.00
Gatoway, flat	60	30	10	115	10.50
Adan butchers, flat	(⁵)	(⁵)	10	170	18.00
Mombassa, flat	25	60	15	110	12.50

¹ Per dozen, flat.² Average per pound.³ Per pound.⁴ Less.⁵ All firsts.

Spain:		
Goatos and cheverettes	dozen	\$30. 00
Greece:		
Macedonian goats, selected basis	do	17. 50
Macedonian cheverettes, selected basis	do	14. 00
India:		
Amritzar, basis 1,000 pounds for 500 skins; 85 per cent firsts, 15 per cent seconds	dozen	13. 00
For each extra 100 pounds, per 500 skins additional	do	1. 00
Wet salted Northwest:		
40 inches and upward	piece	1. 33
36 to 40 inches	do	1. 33
33 to 36 inches	do	1. 23
28 to 33 inches	do	1. 13
Seconds, 70 per cent of price of firsts.		
Dry salted:		
Patnas, about 550 average for 500 skins	dozen	11. 00
Mozufferpores, about 550 average for 500 skins	do	12. 00
Dinajpores, about 550 average for 500 skins	do	11. 75
Daccas, about 550 average for 500 skins	do	13. 00
The above dry salted are all about 50 per cent primes, 30 per cent seconds, 20 per cent thirds.		
Calcutta, killed, about 675 pounds average	dozen	15. 50
Kushitas, about 675 pounds average for 500 skins	do	17. 00
Dry salted Calcutta and Kushitas are about 75 per cent primes, 15 per cent seconds, 10 per cent thirds.		
Northwests, about 900 pounds average for 500 skins, 60 per cent primes, 30 per cent seconds, 10 per cent thirds	dozen	15. 00
Madras, 185 pounds average, flat	do	14. 50
Coconada, 190 pounds average, flat	do	15. 00
Java:		
Java, 82 pounds basis primes	do	15. 00
China:		
Chowchings, short hair, 19 pounds per dozen, average, inclusive, 30 per cent seconds	dozen	19. 00
Chowchings, medium hair, 22 pounds per dozen, average, inclusive, 30 per cent seconds	dozen	16. 50
Chowchings, long hair, 27 pounds per dozen, average, inclusive, 30 per cent seconds	dozen	16. 00
Shuntifus, \$1 per dozen less than Chowchings.		
Patoingfu, \$2 per dozen less than Chowchings.		
Tientsins, \$3 per dozen less than Chowchings.		
Short hair descriptions may include 15 to 20 per cent medium hair.		

	Seconds.	Per dozen.
	Per cent.	
Szechuens, 17 pounds average, inclusive	25	\$27. 50
Wanshiens, 19 pounds average, inclusive	25	21. 00
Honans, 18 pounds average, inclusive	25	14. 50
Clear River, 18 pounds average, inclusive	25	12. 00
Mud cured rivers, 21 pounds average, inclusive	30	8. 00

DEER AND ELK SKINS.

The original schedule for deer and elk skins, effective May 1, 1918, was maintained through December, 1918, with a single exception, noted below:

	Flat.		Flat.
Guatemales	\$0. 75	Tuxpans	\$0. 60
San Salvador	. 75	Matamoras	. 50
Honduras, trimmed	. 70	Paras	. 55
Honduras, untrimmed	. 65	Maranhams	. 70
Costa Ricas	. 70	Oaxacas	. 85
Central Americans	. 70	Panamas	. 65
Angosturas	. 88	Barquismetos	. 35
La Guayras	. 35	Porto Cabellos	. 35
Maracalbo	. 29	West Coast	. 70
Rio Hache	. 31	Chinas, not over 15 per cent seconds	. 95
Sisals	. 65	Singapore elks	. 45
Mexicans	. 55	Macassar elks	. 42

When sold on a selected basis, the maximum prices shall be 10 per cent above the maximum prices set above.
Domestic deerskins from \$1 to \$3.50 per piece, according to size, section, and quality.
Take-off for August, September, and October on Chinas, 1 to 1½ pounds, not over 15 per cent; seconds, \$1.05.

APPENDIX.

SUPPLEMENTARY PRICES AND REGULATIONS ON HIDES AND SKINS, ISSUED ON JULY 1, 1918.

The maximum price on standard packer kid skins, measuring about two-thirds the size of the goatskins is two-thirds the price of the goatskins.
The maximum price on butcher and country kid skins is \$4 per dozen.

The maximum price on Sumatra buffalo hides is 33 cents for trimmed and shaved, 31 cents on untrimmed and shaved.

The maximum price in Tapuchula, Mexico, wet salt hides is 22½ cents.

The maximum prices on Sumatra cowhides, shaved, are as follows:

Skippers own
preparation.

Country and untrimmed:

About 1 to 6 pounds about 2 kilos average, 65 cents c. and f.-----cents-- 70

About 6 to 10 pounds about 3½ kilos average, 58 cents c. and f.-----do----- 68

About 10 to 15 pounds about 6 kilos average, 52 cents c. and f.-----do----- 57

The maximum price on Cuban wet salt hides is 19 cents.

The maximum price of Tuxpan, Mexico, wet salt hides is 21½ cents.

The maximum price on Canton, China, shaved dry hides is as follows:

One to 6 pounds, 69 cents; 6 to 10 pounds, 62 cents; 10 to 15 pounds, 56 cents; c. i. f. and war risk New York basis.

The maximum price on China dry donkey hides is \$2 each c. i. f. and war risk, New York basis.

The maximum price on Mendez, Brazil, frigorifico hides is 20 cents weighed ex dock New York. Delaware and New Jersey are classed with the New England States.

The maximum price on Madras pickled goatskins is \$15.50 per dozen.

The maximum price on Madras extra large goatskins about 27 pounds average is \$16.50.

The maximum price on Argentine wet salt Matadero and Campo kip is 20 cents.

The maximum price on Courland Scharren dry calf is \$1.20 per pound; Courland slaughter dry calf is \$1.10 per pound; Wlatka dry calf is \$1.07 per pound; Palloy dry calf is 45 cents per pound.

The maximum price on Mexican wet salt kips is the same price as the maximum on the same kind of hides.

The maximum price on Tampico, Mexico, dry hides is 32½ cents.

The maximum price on Madras sheepskins, basis 85 per cent primes and 15 per cent seconds, average about 190 to 200 pounds, is \$11.

The maximum prices on Hulo (Hawaiian Islands) packer steers, 27 cents; cows, 22 cents, ex store San Francisco.

The maximum price on ducca cowhides 9 to 12 pounds and 12 to 15 pounds is 26 cents c. f. s.

The maximum price on China wet salt buffaloes is 13 cents.

The maximum price on Habana packer hides of superior take-off and preparation is 1 cent per pound more than other Habana packer hides.

The price on Chicago and other large city first-salt calfskins applies to all other first-salt untrimmed skins in carload lots, equal in all respects to Chicago skins. Other first-salt skins of inferior quality, take-off, and preparation shall sell at relatively less.

Any resalted packer, abattoir, or wholesale butcher calfskins shall sell at relatively less than the price of 44 cents, which is for first-salt standard packer stock on Chicago freight basis.

The maximum price on River Plata frigorifico-type kips and extremes is 26 cents and freight, shrinkage guaranteed not to exceed 10 per cent, to New York or Boston.

A go-between can not charge a brokerage to both buyer and seller. No one owing a lot of hides or skins can charge his customer a brokerage when selling same. Any tanner may pay an agent a brokerage for buying hides or skins (except on hides or skins which the agent owns himself), but such agent may not buy less than carload lots of butchers at a higher price than 10 per cent under applicable maximum prices. No brokerage shall exceed 2 per cent.

Small packer, abattoir, and wholesale butcher price light calf (7 to 8 pounds) and deacons are governed by the packer calf price of 44 cents for first-salt stock, on Chicago freight basis, and taking into consideration any inferiority as to take-off and salting.

BLACK HARNESS LEATHER.

Harness leather.—The prices of black harness leather were fixed by the price-fixing committee on June 25, 1918, subject to revision November 1, 1918, or before that date, contingent upon possible changes in the prices of hides and skins. The prices in the schedule below were later extended until November 20, 1918, when price fixing was here ended.

BLACK HARNESS LEATHERS.

(June 25, 1918.)

	Per pound.
Grade A, or first selection-----	\$0. 70
Grade B, or second selection-----	. 68
Grade C, or third selection-----	. 66
First selection, butt brands-----	. 68
Second selection, butt brands-----	. 66

SOLE AND BELTING LEATHER.

(Aug. 9, 1918.)

Provisions for the control of prices and output of sole and belting leather became effective August 9, 1918, and were administered by the hide and leather section of the War Industries Board. These regulations and prices, which are given below, were extended on October 8, 1918, until December 8, 1918, when they were removed.

REGULATIONS.

These maximum prices on grades are based on maximum prices of No. 2 selection as basis for tannery run. When sold in selections the assortment value of the total selections shall not exceed the maximum price of the No. 2 or tannery run.

In Texas scoured or bloom oak sole leather, classification No. 3, the tannery run maximum price is 87 cents, and when sold in selections the assortment value of the four selections shall not exceed the maximum tannery-run price of 87 cents.

These prices apply to all sales made by tanners or by their representatives or by jobbers, but do not apply to sales made by retail dealers or by the so-called findings trade.

DIFFERENTIALS.

Tanners who claim preferential differentials on account of low yield of leather will make application for same to the hide, leather, and leather goods division of the War Industries Board.

The conditions upon which they will be given this advantage are:

That their yield shall be at least seven points under the yield used as a factor in determining maximum prices on the same season's hides and that a sworn statement shall be rendered to this effect and shall be the result of at least six months' operation.

That they will make consecutive monthly reports to the hide, leather, and leather goods division of the War Industries Board of their yield.

Every side of subdivision of these sides shall be stamped with the name of the tannage.

Tanneries producing leather of such high yield as to exceed the arbitrary factor of yield used in figuring maximum prices on the same season's hides by more than seven points shall be subject to a differential reduction, such reduction to be figured on the excess yield beyond or above the seven-point allowance. Every side or subdivision of these sides shall be stamped with the name of the tannage.

When requested by the hide, leather, and leather goods division of the War Industries Board tanners will make monthly reports of their yields, stating classes and seasons of hides.

PRICE OF OFFAL.

These maximum prices are established for three months and at a time when all offal is a burden on the market. At the expiration of the three months, if the offal has found an outlet and established a higher market level, this additional return in value to tanners will be reflected in the readjustment of a new schedule three months hence.

High-grade heavy packer oak belting butts, made from packer heavy native and light native steers and heavy native cows (based on yield of 65 per cent):		Per pound
No. 1	-----	\$0.96
No. 2	-----	.94
No. 3	-----	.86
High-grade light packer oak belting butts under 20 pounds, made from light native cows and extreme light native steers (based on yield of 62 per cent):		
No. 1	-----	.91
No. 2	-----	.89
No. 3	-----	.81

	Per pound.
High-grade Texas scoured or bloom oak sole leather, made from packer heavy and light Texas steers (based on yield of 83 per cent) :	
Tan run sides	\$0. 57½
Tan run bends	. 87
X sides	. 59½
A sides	. 58½
B sides	. 57½
C sides	. 56½
X bends	. 90
A bends	. 88
B bends	. 86
C bends	. 84
High-grade heavy or overweight oak sole leather, made from packer butt brands and Colorado steers, oak trim (based on yield of 78 per cent) :	
No. 1 sides	. 61
No. 2 sides	. 59
No. 3 sides	. 55
No. 1 backs	. 77
No. 2 backs	. 75
No. 3 backs	. 71
No. 1 bends	. 90
No. 2 bends	. 88
No. 3 bends	. 84
High grade heavy or overweight union sole leather made from packer butt brand and Colorado steers and frigorifico steers, union trim (based on yield of 80 per cent) :	
No. 1 sides	0. 59
No. 2 sides	. 57
No. 3 sides	. 53
No. 1 backs	. 75
No. 2 backs	. 73
No. 3 backs	. 69
No. 1 bends	. 88
No. 2 bends	. 86
No. 3 bends	. 82
High grade light or middleweight oak sole leather made from packer branded cows, oak trim (based on yield of 75 per cent) :	
No. 1 sides	. 56½
No. 2 sides	. 54½
No. 3 sides	. 50½
No. 1 backs	. 72½
No. 2 backs	. 70½
No. 3 backs	. 66½
High grade light or middleweight oak sole leather, union trim based on yield of 75 per cent) :	
No. 1 sides	. 58½
No. 2 sides	. 54½
No. 3 sides	. 50½
No. 1 backs	. 71
No. 2 backs	. 69
No. 3 backs	. 65
Country or domestic hides, heavy or overweight oak or union leather, made from steers or heavy cows (based on yield of 68 per cent) :	
No. 1 sides	. 53
No. 2 sides	. 51
No. 3 sides	. 47
Country or domestic middleweight oak or union leather made from cows or extreme light steers (based on yield of 68 per cent) :	
No. 1 sides	. 50
No. 2 sides	. 48
No. 3 sides	. 44
High grade heavy or overweight hemlock leather made from packer heavy (based on yield of 90 per cent) :	
No. 1 sides	. 56
No. 2 sides	. 54
No. 3 sides	. 50
High grade middleweight hemlock sole leather made from extreme Texas and branded cows (based on yield of 80 per cent) :	
No. 1 sides	. 54
No. 2 sides	. 52
No. 3 sides	. 48
Country or domestic hide, heavy or overweight hemlock, made from steers or heavy cows (based on yield of 80 per cent) :	
No. 1 sides	. 48
No. 2 sides	. 47
No. 3 sides	. 43
Country or domestic hemlock made from cows or extreme light steers (based on yield of 80 per cent) :	
No. 1 sides	. 47
No. 2 sides	. 45
No. 3 sides	. 42
High grade dry hide heavy overweight and middleweight hemlock made from Buenos Aires hides (based on yield of 170 per cent) :	
Tan-run sides	. 48
Buffalo dry hide overweight (based on yield of 190 per cent) :	
Tan-run sides	. 34

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7. LUMBER.

control of lumber prices was taken in 1917 with the in-
ter committee of the Council of National Defense, of
semiofficial Government agents in the purchase of Gov-
ernments.¹

regulations concerning lumber prices and the regulations and
to individual species appear below in the following order:
as, birch logs, black walnut, cypress and tupelo, Douglas fir,
New England spruce, North Carolina pine, Pennsylvania hem-
lock, yellow pine, western spruce.

GENERAL REGULATIONS.

Government lumber prices, March 30, 1918.—All lumber manu-
facturers and dealers are hereby notified that the present Government yellow
lumber prices for mill shipments from the Southern States are
in effect until June 15, 1918, and that in no case must orders for lum-
ber shipments be accepted, sold, or invoiced to the Government or Gov-
ernment contractor, having a cost-plus job, either by manufacturers or dealers,
at a price per item than the maximum price fixed by the Government.

announcement regarding lumber made by the price-fixing committee
of the War Industries Board, June 11, 1918.—The price-fixing committee of the
War Industries Board has fixed maximum item prices for northwestern fir logs
and for southern pine lumber. The detailed schedules of these item
prices have been approved by the President and publicly announced. The prices
fixed are manufacturers' f. o. b. mill prices for shipment at the mills, the
same for all purchasers. They are maximum prices, not fixed prices, to hold for
a period of 90 days from June 15.

A regulation has been made with regard to transactions other than sales by
manufacturers at the schedule prices. Wholesale dealers, retail dealers, and all
others are entitled to buy on the basis of these f. o. b. mill prices. As yet no
regulation of rates or profits has been made with regard to sales either by
wholesalers or retailers to consumers. The War Industries Board believes that
sales by all dealers should be made at reasonable prices based on a strictly rea-
sonable profit above the fixed schedule rates. The board is confident that the
trade will conform to the spirit of the existing regulations and the board will

¹ These bureaus and dates of organization were as follows: Southern pine emergency
bureau, May, 1917; North Carolina pine emergency bureau, May, 1917; Georgia-Florida
yellow pine emergency bureau, June, 1917; New England spruce emergency bureau, June,
1917; Douglas fir emergency bureau (later organized as the fir production board), October,
1917; Northern hardwood emergency bureau, Nov. 24, 1917; Central Pennsylvania hem-
lock emergency bureau, Apr. 6, 1918; Cypress emergency bureau.
² Price-Fixing Committee Minute Book II, Mar. 30, 1918.

not proceed to further regulation or restriction of dealers' prices until their conduct of business indicates that such action is necessary.

Retail lumber prices.—Occasional purchases of lumber from retail lumber dealers to meet emergency needs became necessary for certain branches of the Government, and in order to insure a fair and reasonable price a fixed maximum retail price was established for Douglas fir and southern yellow pine lumber for the period from June 1, 1918, to July 31, 1918. These prices applied to emergency purchases of lumber from retail lumber dealers in the cities and vicinities of Boston, New York, Newark, N. J., Philadelphia, and Baltimore.

The agreement was—

That the dealers be allowed for handling charges and profit the following advance prices over and above the Government's delivered prices f. o. b. cars in the districts mentioned, including switching charges, if any: To the dealers in the cities and vicinities of Boston, New York City, Newark, N. J., \$12.50 per 1,000 feet b. m.; to the dealers in the cities and vicinities of Philadelphia and Baltimore, \$11.50 per 1,000 feet b. m.

These prices in all districts to be based on the Government department replacing the lumber to the dealers within 90 days from date of replacement order at the Government's manufacturers' prices delivered f. o. b. cars in the districts mentioned, provided the dealers prefer to have the lumber replaced, or a cash settlement on the same basis if they prefer not to have the lumber replaced. These prices to the Government for the lumber received from the retail dealers in all cases to be f. o. b. dealers' wagons, trucks, or railroad cars in dealers' yards.

Working.—Where dressing or ripping is necessary to obtain the items desired by the Government, charges for same shall not exceed the following: Dressing one, two, or four sides, \$4 per 1,000 feet b. m.; ripping or resawing (first cut), \$4 per 1,000 feet b. m.; ripping or resawing (second cut), \$2 per 1,000 feet b. m.

Teaming.—When lumber is hauled by retail yards the charges for same shall not exceed the charges following: By auto truck, \$2.50 per 1,000 feet first mile, with allowance of 35 cents per 1,000 each additional mile; by team, \$1.75 per 1,000 feet first mile, with allowance of 25 cents per 1,000 each additional mile.

In the event the Government does not replace the lumber taken from local yards within the time stated above it is understood that the retailer may refuse to accept lumber replacement, and settlement for lumber taken should be made on basis of the following allowances in addition to the original replacement price: \$6 per 1,000 feet on all short leaf; \$6 per 1,000 feet on all long leaf under 12 inches; \$10 per 1,000 feet on all long leaf 12 inches and over.

In the matter of replacing lumber taken from retail yards under the above agreement it is understood that the lumber is to be replaced in the same sizes or easier sizes than the sizes taken from the retail dealers; that is to say, if boards are taken from the retail dealers, boards are to be replaced; or if framing lumber is taken, framing lumber is to be replaced in sizes no larger than the sizes taken.

For the present, at least, it is understood that all lumber replacements will come from the districts of Alabama-Mississippi territory, southern pine territory, Georgia-Florida territory, and from the first district in the Pacific Northwest. If North Carolina pine is taken from the retail dealers' yards, it may or can be replaced by comparable grade from the shortleaf territory of the above-mentioned producing districts.

All requests for replacement by the retail dealers should be accompanied by the signature of the receiving Government officer or agent, that the director of lumber may know in replacing this lumber that the sizes and quantities asked for are justified, and should be submitted to the Government bureau in Washington through which the original authority for the original purchase by the Government was authorized.

It must be distinctly understood that the above prices referred to are only effective in the cities and vicinities above mentioned, where the costs of handling and doing business have been investigated by the Federal Trade Commission.

All departments of the Army and Navy and the Emergency Fleet Corporation agree immediately to put maximum prices into effect, and all purchasing officers of all departments are to be notified immediately of the above decision.¹

Notice as to application of prices for soft wood lumber affected by rulings of the price-fixing committee of the War Industries Board.—All lumber manufacturers and dealers are hereby notified that the present prices for soft lumber for mill shipment as heretofore established or which may hereafter be established by the price-fixing committee of the War Industries Board shall remain in effect during the period of time prescribed and that in no case must orders for lumber for mill shipment or reconsignment thereof be accepted, sold, or invoiced to any purchaser by either a manufacturer, dealer, or other person at a greater price per item than the maximum price fixed by the price-fixing committee of the War Industries Board, except where delivered prices are made to purchasers' destination points, in which cases freight may be added on the basis of standard weights for each item so priced, also except as to orders received or contracts made prior to the date of ruling of the price-fixing committee governing the producing territory involved.

The price-fixing committee has taken the position that cost figures presented by the Federal Trade Commission on which the price-fixing committee has based its ruling already include sales service to purchaser. So, in fact, in paying the price fixed in the ruling, the purchaser has already paid for this sales service. The purchaser or public should not be asked to pay any additional price to any vendor offering mill shipments.²

The wholesale lumber dealers of the country protested against this ruling, saying that the prices as fixed did not allow any compensation or profit to them in the sale and distribution of lumber and that the strict application of the ruling would destroy a selling and distributing agency which had long been a recognized factor in the lumber trade. On July 23 the price-fixing committee, after consideration of arguments submitted by the wholesale lumber dealers, refused to modify its ruling of July.³

Statement on southern pine prices on Government orders.—*Settlement of question of price with southern pine emergency bureau as to orders on hand prior to midnight, June 14, 1918.*—On all Government orders on which the price is fixed by the Government the price in effect on the date of shipment rather than the price in effect on the date the order is placed shall control, unless expressly stipulated to the contrary at the time the price is fixed, or unless a different rule is adopted by mutual agreement between the Government and the manufacturer.

CONDITION TO THE RULE.

As a condition to this rule, it must be understood, however, that the shipper will exercise due diligence in an effort to prepare and move the items covered by such order, and that the southern pine emergency bureau will exercise its best efforts in inducing the members with whom orders are placed to send shipments forward as promptly as possible; provided that if it is established that due diligence has not been used by any mill, the price shall be the lower price applying in the price-fixing periods involved.

ORDERS UNSHIPED.

All orders for the Government unshipped on June 14, 1918, shall take the price prevailing at the time such orders were placed with the bureau; provided that this rule shall not be construed to apply to orders placed prior to June 14, 1918, for shipment after September 14, 1918. All restrictions as to deferred shipments are permitted to be removed. If not permitted by car builders to be shipped by September 14, the price applying at the time of delivery shall apply.⁴

Procedure for distribution of southern or yellow pine lumber.—At a hearing of the manufacturers of southern or yellow-pine lumber, before the price-fixing

¹ Official Bulletin, June 19, 1918.

² Price-Fixing Committee Minute Book V, July 1, 1918; Official Bulletin, July 5, 1918.

³ Price-Fixing Committee Minute Book VI, July 15, 1918.

⁴ Price-Fixing Committee Minute Book VI, July 17, 1918; Official Bulletin, July 19, 1918.

committee of the War Industries Board on September 23, 1918, it was agreed that the ruling of June 14, 1918, fixing maximum f. o. b. mill prices on southern or yellow-pine lumber should remain in effect from midnight September 23 to midnight December 23, 1918, inclusive.

It was also decided by the price-fixing committee and the representatives of Government departments that inclusive within these dates timber prices on the lumber schedule should apply to all shipments to Government departments, including the Emergency Fleet Corporation.

It was decided by the price-fixing committee that the interpretation of the terms of sale should be as follows:

The usual trade practices shall continue, including 2 per cent off for cash within 10 days from date of invoice to be applied to United States Government purchases as well as all others (except in special cases where former trade practice has well established net cash terms and except as to export shipments to foreign countries). In transactions where purchasers do not avail themselves of cash discounts the terms shall be 60 days net from date of invoice, and in such transactions the accounts may be converted into trade acceptances which do not bear interest before maturity.

As regards the requirement by the Railroad Administration that shippers shall bulkhead the ends of open freight cars, it was decided that an extra charge for lumber and labor for constructing bulkheads may be made by the shipper and invoiced to consignee, irrespective of whether or not for Government or civilian use.

On the readjustment of item prices it was decided that the director of lumber, in conference with the war-service committee of the manufacturers, should have discretion to make certain minor changes and corrections in the item prices, which, however, should not affect the average base price.

As to price concessions made by manufacturers to wholesale distributors, it was decided to incorporate in the present announcement a formal statement, to wit:

That in cases where manufacturers make reductions from the maximum prices to wholesale dealers, the reductions should be considered in the nature of an allowance to cover the expense and profit of sales by wholesale dealers and should not be interpreted as constituting a general reduction in the market price of lumber to the trade.

BIRCH LOGS.

An informal agreement as to fair and reasonable prices for birch veneer logs suitable for airplane purposes was made on October 30, 1918, at a conference in which the lumber section of the War Industries Board, bureau of aircraft production, and representatives of veneer manufacturers and loggers were present. The prices agreed upon, f. o. b. shipping point, for logs of veneer quality were as follows: Logs 12 to 15½ inches in diameter, \$55 per thousand feet; logs 16 inches and up in diameter, \$65 per thousand feet. These prices remained unchanged throughout the period of the war.

BLACK WALNUT.

No official price was set on black walnut as a whole, but a fixed maximum price was set on gunstock fitches and propeller blades.

On August 10, 1917, the Ordnance Department of the United States Army fixed a maximum price of \$1.05 each for gunstock dimension blanks f. o. b. mill. On August 1, 1918, the price was raised to \$1.20 each by action of the price-fixing committee of the War Industries Board.

The Signal Corps of the United States Army on January 28, 1918, fixed a maximum price of \$310 per thousand board feet for airplane propeller stock, which was continued throughout the war.

On August 1, 1918, the price-fixing committee also made an informal agreement with lumber manufacturers as to the price of 2½-inch black walnut fitch,

which was set at \$80 per thousand board feet f. o. b. mill. This price was not binding on manufacturers, but was regarded as a fair price for the material. An informal agreement was also made on August 7, 1918, between the price-fixing committee and walnut log buyers as to a fair and reasonable price to be paid for black walnut logs. An announcement was made as follows:

As an aid to the Government in securing the outturn at fair and reasonable prices of the walnut timber necessary for its needs and for the protection of the walnut timber owners we ask that you give publicity to the following ranges of prices for each diameter which the log buyers or the walnut manufacturers having Government contracts for gunstocks and propeller lumber will pay for good walnut logs 12 inches and up in diameter and 8 feet and up in length.

Diameter(inches).	Prices of black walnut logs 8 feet and over long on board cars on railroad.		Equivalent value for standing timber.	
	Minimum.	Maximum.	Minimum.	Maximum.
	Per M.	Per M.	Per M.	Per M.
14.....	\$45	\$55	\$20	\$35
16.....	55	65	30	45
18.....	65	75	40	50
20.....	75	85	50	60
22.....	85	95	60	70
24.....	95	105	70	80
26.....	105	115	80	90
28.....	115	125	90	100
30.....	125	135	100	110
31 and up.....	135	150	110	120

In arriving at prices which it is paying for propeller lumber and gunstocks the Government has taken these log prices into consideration, and has allowed the mills prices for the material it gets which will allow for only a fair and reasonable profit both to the mills and the log buyer.

The above prices were used as a guide only, purchases being made both above and below those given in the log price list.

CYPRESS AND TUPELO.

The maximum price of cypress and tupelo lumber was not fixed by the price-fixing committee, but an unofficial price list was issued by the Cypress emergency bureau, which was recognized as representing fair and reasonable prices. The list was dated October 25, 1918, and was in effect to the close of the war period.

CYPRESS EMERGENCY BUREAU.

[Net cypress and Tupelo list for Government f. o. b. mills in North and South Carolina, Georgia, Florida, and Louisiana.]

CYPRESS.

Rough, random width.	Tank.	Factory select.	Shop.	Box.	Peck.
1 inch.....		\$35.00	\$29.50	\$25.00	\$16.00
1 1/2 inches.....		40.50	35.50	26.00	18.00
1 3/4 inches.....	\$61.00	43.00	36.50	26.00	18.00
2 inches.....	67.00	46.00	38.50	26.00	16.00
2 1/2 inches.....	85.00	57.50	50.50		
3 inches.....	85.50	57.50	50.50		
4 inches.....	94.50	66.50	59.50		

For S1S or S2S add \$1.50 per thousand.
 1-inch to 2-inch factory select, shop, box are for standard lengths. Add \$1 per thousand for each foot over 20 feet.
 Prices specified on 1 1/2 and 2 inch tank 8 to 16 feet. For 18 and 20 feet add \$4 per thousand. On 2 1/2 to 4 inches, all grades, add \$2 per thousand for each foot over 16 feet.

Finishing lumber S1S or S2S.	A.	B.	C.	Select common.
1 by 4, 6, 8, and 10 inches, 10/20.....	\$53.00	\$47.50	\$44.00	\$38.50
1 by 12, 10/20.....	58.50	52.00	51.00	45.50
1 by 4 to 12 inches, R. W., 10/20.....	53.00	47.50	44.00	38.50
1 by 13 to 19 inches, inclusive, 10/16 ¹	67.50	62.00		
1 by 14, 10/16 ¹	65.00	59.50		
1 by 16, 10/16 ¹	69.50	64.00		
1 by 18, 10/16 ¹	74.00	68.50		
1 by 20 to 23 inches, inclusive, 10/16 ¹	81.00	75.50		
1 by 24 and wider, 10/16 ¹	94.50	89.00		
1½ by 4, 6, 8, and 10 inches, 10/20 ¹	56.50	51.50	47.50	42.50
1½ by 12, 10/20 ¹	62.00	56.00	54.50	49.00
1½ by 4 to 12 inches, R. W., 10/20 ¹	56.50	51.50	47.50	52.50
1½ by 13 to 19 inches, 10/16 ¹	71.00	65.50		
1½ by 14, 10/16 ¹	68.50	63.00		
1½ by 16, 10/16 ¹	73.00	67.50		
1½ by 18, 10/16 ¹	77.50	72.00		
1½ by 20 to 23 inches, inclusive, 10/16 ¹	84.50	80.00		
1½ by 24 and wider, 10/16 ¹	98.00	92.50		
2 by 4, 6, 8, and 10 inches, 10/20.....	66.50	61.00	53.00	47.50
2 by 12, 10/20.....	72.00	65.50	60.00	54.50
2 by 4 to 12 inches, R. W., 10/20.....	66.50	61.00	53.00	47.50
2 by 13 to 19 inches, inclusive, 10/16 ¹	81.00	75.50		
2 by 14, 10/16 ¹	78.50	73.00		
2 by 16, 10/16 ¹	83.00	77.50		
2 by 18, 10/16 ¹	87.50	82.00		
2 by 20 to 23, 10/16 ¹	94.50	89.00		
2 by 24 and wider, 10/16 ¹	108.00	102.50		

¹ For 1½ add \$1 over price 1½.

For rough, deduct \$1.50 per thousand. For S4S, add 50 cents per thousand.

For 13 inches and wider random or specified widths, add \$1 per thousand for each foot over 16 feet.

For 10 to 16 foot lengths in 2½, add \$13; for 3 inches add \$17; and for 4 inches add \$23 to price of 2 inches.

For specified lengths, 1 to 2 inches, add \$2 per thousand; 2½ to 4 add \$2 per thousand for each foot over 16 feet.

Panel stock: ½ by 8 inches and wider, S2S to ⅞ inch, \$28; ¾ by 8 inches and wider, S2S to ⅞ inch, \$34.50; 1 by 8 inches and wider, S2S to ⅞ inch, \$40; 1½ by 8 inches and wider, S2S to ⅞ inch, \$47.

For specified widths up to 12 inches, add \$2.50.

Wider than 12 inches and less than 16 inches, add \$6 per M. S. M.; 16 inches and wider, \$9 per M. S. M.

Flooring, ceiling, drop siding, shiplap, casting and base.	A.	B.	C.	Select common.
¾ by 4 or 6 inches, 8/20.....	\$29.00	\$26.00	\$24.50	
¾ by 4 or 6 inches, 8/20.....	36.50	34.00	32.00	
¾ by 4 or 6 inches, 8/20.....	44.50	42.00	40.00	
1 by 3.....	57.00	49.00	45.50	\$40.00
1 by 4, 5, 6, and 8 inches, 8/20.....	56.50	48.50	45.00	39.50
1 by 10, 8/20.....				39.50
1 by 12, 8/20.....				46.50

For 1½ inches, add \$4; 1¾ add \$5; 2 inches add \$15 to price of 1 inch.

For partition add \$5 per thousand.

Short flooring, ceiling, etc., 4 to 8 feet, \$4 per thousand less than standard lengths, in same width and grade.

Bevel siding.	A.	B.	C.	D.
¾ by 4, 8/20.....	\$27.00	\$24.50	\$22.50	\$16.00
¾ by 5, 8/20.....	27.00	24.50	22.50	19.50
¾ by 6, 8/20.....	28.00	24.50	22.50	17.00

¾ by 4 or 6 mixed lengths only from inch stock, 4 by 8 feet, B and better, \$21.

PRICES DURING THE WAR.

Shingles.	A.	B.	C and better.	D.
.....	\$31.50	\$28.00	\$27.00	\$26.00
.....	40.50	37.00	36.00	35.00
.....	40.50	44.00	43.00	42.00

..... add \$1.
 add \$1.

BYRKIT SHEATHING LATH.

..... \$19.50; short lengths, \$18.50; all orders must include reasonable percentage of short lengths.

Shingles.	Best.	Primes.	Economy.	Xar.	Chipp.
.....	\$2.75	\$2.70			
.....	4.65	2.60	\$2.70		\$1.95
.....	4.90	2.85	3.00		1.95
.....	4.90	2.85	3.00		1.95
.....				\$2.05	1.80

TUPELO.

	Standard lengths.
Wagon box boards, 13 to 17 inches.....	\$40.50
Wagon box boards, 8 to 12 inches.....	37.00
First and seconds.....	29.00
No. 1, common.....	26.00
No. 2, common.....	23.50
No. 3, common.....	18.00
Log run, No. 3, common and better with firsts and seconds out.....	23.30
Log run, No. 3, common and better with firsts and seconds in.....	24.25
1 by 3 wider, 12 to 36 inches, C and better, shorts.....	21.50
Finish, flooring, ceiling, siding, partition, worked:	
Finish B and better, 4 to 10 inches, specific widths.....	31.50
Finish B and better, 12 inches.....	38.00
Finish B and better, 4 to 12 inches, assorted widths.....	34.00
Finish B and better, 13 inches and wider.....	43.00
Finish C, 4 to 10 inches, specified widths.....	27.00
Finish C, 12 inches.....	31.50
Finish C, 4 to 12 inches assorted widths.....	28.00
Flooring and ceiling, B and better.....	36.00
Flooring and ceiling, C.....	31.50
Partition, B and better.....	40.50
Partition, C.....	36.00
Drop siding, C and better.....	31.50
Bevel siding, B and better.....	20.00
Bevel siding, C.....	18.00

When specific prices are not given on worked stock add the following working charges, stock to be graded before working:

Add \$1.50 for each resaw.

Add \$0.50 for each rip or cross cut.

Add \$3 for each S2S and resaw.

Add \$4 for resawing and S2S afterwards.

Add \$2.50 for making flooring, shiplap, ceiling, grooved roofing, jamba, bevel cribbing, or drop siding.

No. 1 common rough.	R. L.	6 and 8.	10	12	14	16	18	20
1 by 3.....	\$32.50	\$30.50	\$32.50	\$32.50	\$32.50	\$32.50	\$32.50	\$32.50
1 by 4.....	32.50	30.50	32.50	32.50	33.50	33.50	33.50	34.00
1 by 5.....	32.50	30.50	33.50	34.00	31.00	33.00	34.00	35.00
1 by 6.....	32.50	30.50	32.50	32.50	22.50	35.00	32.50	32.50
1 by 8.....	32.50	30.50	32.50	32.50	32.50	32.50	32.50	34.00
1 by 10.....	32.50	30.50	33.50	34.00	31.50	33.00	34.00	34.50
1 by 12.....	38.00	36.00	39.50	40.50	37.00	38.00	40.50	42.50
2 by 4.....	34.00	32.50	34.00	34.00	34.00	35.00	35.00	36.00
2 by 6.....	34.00	32.50	34.00	34.00	34.00	34.00	34.00	34.00
2 by 8.....	34.00	32.50	34.00	34.00	34.00	34.00	35.00	36.00
2 by 10.....	34.00	32.50	35.00	36.00	33.50	34.50	36.00	36.50
2 by 12.....	39.50	38.00	41.50	42.50	38.50	39.50	42.50	44.00

For specified lengths add \$1 per thousand feet to these prices.

No. 2 common rough.	R. L.	6 and 8.	10	12	14	16	18	20
1 by 3.....	\$29.00	\$27.00	\$29.00	\$29.00	\$29.00	\$31.50	\$29.00	\$29.00
1 by 4.....	28.50	26.50	28.50	28.50	28.50	28.50	29.50	29.50
1 by 5.....	28.50	26.50	29.50	29.50	29.50	28.50	29.50	30.00
1 by 6.....	28.50	26.50	28.50	28.50	28.50	31.00	28.50	28.50
1 by 8.....	28.50	26.50	28.50	28.50	28.50	28.50	29.50	29.50
1 by 10.....	28.50	26.50	29.50	29.50	28.50	28.50	29.50	30.00
1 by 12.....	32.50	30.50	33.50	33.50	32.50	32.50	33.50	34.50
2 by 4.....	30.00	28.50	30.00	30.00	30.00	30.00	31.00	31.00
2 by 6.....	30.00	28.50	30.00	30.00	30.00	30.00	30.00	30.00
2 by 8.....	30.00	28.50	30.00	30.00	30.00	30.00	31.00	31.00
2 by 10.....	30.00	28.50	31.00	31.00	30.00	30.00	31.00	32.00
2 by 12.....	34.00	32.50	35.00	35.00	34.00	34.00	35.00	36.50

For 1½ and 1¾ add \$2 to price of 1 inch.
For S1S or S2S add \$1.50 per thousand feet.
For S4S or S1S and 1E add \$2 per thousand feet.

Timbers (green), rough:	
3 by 4, 4 by 4, 4 by 6, 10/16.....	\$31.50
3 by 6 and 3 by 8, 10/16.....	32.50
3 by 10 and 3 by 12, 10/16.....	34.00
6 by 6 and 6 by 8.....	34.00
For S1S or S2S, add \$1.50 per thousand.	
For S4S or S1S and 1E, add \$2 per thousand.	
Battens, 10/16:	
1 by 3 inches, S1S.....	5.00
1 by 3 inches, O. G.....	5.25
2-inch O. G. finish, 12/16 by 1½ inches.....	6.50
2½-inch O. G. finish, 12/16 by 2½ inches.....	9.00
For 18 and 20 foot battens add 25 cents.	
Lath:	
No. 1, 1 by 1½ inches, 4-foot.....	4.25
No. 2, 1 by 1½ inches, 4-foot.....	3.80
No. 1, 1 by 1½ inches, 32-inch.....	1.80
No. 1, 1 by 1½ inches, 4-foot.....	7.65

DOUGLAS FIR.

The first price control of Douglas fir was carried out by the Douglas Fir Emergency Bureau, and the item prices listed at that time were in effect from December 1, 1917, to March 1, 1918.

These prices were adopted by the price-fixing committee, to be effective from March 19, 1918, to June 1, 1918.

The entire fir schedules were revised in June, 1918, by the price-fixing committee and the lumber director. The new prices represented an average increase of approximately \$2.75 per thousand board feet and were made applicable to both the Government and public purchases.

The new schedules became effective June 15, 1918, and provided a base price for Douglas fir of \$26 per thousand feet; \$40 per thousand feet for rough and dressed timber, and \$50 for aircraft timbers. The log range was from \$12 to \$20 per thousand feet.

The following announcement by the price-fixing committee accompanied the schedules of June 15, 1918:

No regulation has been made with regard to transactions other than sales by manufacturers at the schedule prices. Wholesale dealers, retail dealers, and all others are entitled to buy on the basis of these f. o. b. mill prices. As yet no regulation of rates or profits has been made with regard to sales either by wholesalers or retailers to consumers. The War Industries Board believes that sales by all dealers should be made at reasonable prices based on a strictly reasonable profit above the fixed schedule rates. The board is confident that the trade will conform to the spirit of the existing regulations and the board will not proceed to further regulation or restriction of dealers' prices until their conduct of business indicates that such action is necessary.²

¹ For 18 and 20 foot add \$1 per thousand.
² Official Bulletin, June 24, 1918.

The prices of June 15, originally effective for 90 days, were extended to October 15, 1918, and at that time it was agreed that they should be continued until January 15, 1919, when all price control over Douglas fir was discontinued.

Airplane fir.—On April 10, 1918, the spruce production division of the Signal Corps of the United States Army issued a schedule of prices for Douglas fir airplane material. The f. o. b. mill price for lumber cut to specification was \$65 per thousand board feet. In July these prices were superseded by others which carried a price of \$50 per thousand board feet f. o. b. mill.

The War Industries Board announced, on March 19, 1918, the following rulings:

That the maximum price for fir logs in the Pacific Northwest, delivered at the points where it has been customary to make delivery to the sawmill operators, be fixed at \$19 per 1,000 for No. 1 logs, \$15.50 per 1,000 for No. 2 logs, and \$10 per 1,000 for No. 3 logs, scale as to grade and contents to be determined according to the methods that have been customary in the various districts for the past four or five years. These prices are a basis for logs up to and including 40 feet in length. Logs over 40 feet in length to be priced on the same basis for extra lengths as has heretofore been established by custom. In no case shall any greater price than that mentioned above be allowed for logs of those grades during the period of March 19 to May 31, 1918.

That the price of fir ship timbers under the Ferris schedule to the Emergency Fleet Corporation be readjusted at item prices that will average \$40 per 1,000 for a complete schedule for both the rough and dressed items, and that all sales of lumber for other vessels under Government contract requiring a schedule of lumber of similar type shall be furnished at not to exceed the same basis of prices.

That the prices of fir lumber for aircraft use to both the United States Government and the Allies remain the same as those now in effect (Mar. 19, 1918).

That the prices of all other items of fir lumber remain the same as those enumerated in the appended list of the Douglas fir emergency bureau, effective between the dates of December 1, 1917, and March 1, 1918, to all other departments of the Government be continued in effect to May 31, 1918.

Prices named on West Coast Lumber Association's yellow sheet bearing date December 1, 1917, covering timber 34 feet and longer, shall be canceled and a price of \$6 per 1,000 over West Coast price list of May 1, 1915, hereby is made effective for timbers of above lengths until May 31, 1918. Prices on items not covered by above list shall be based on the nearest comparable item. It is understood that during this time the loggers and lumber manufacturers will not reduce the scale of wages now being paid.

F. o. b. mill prices December 1, 1917, and May 31, 1918:

FIR COMMON BOARDS S1S OR SHIPLAP.

1 by 2, 6 to 20 feet, mixed lengths, S1S.....	\$18.00
1 by 3, 6 to 20 feet, mixed lengths, S1S.....	18.00
1 by 4, 6 to 20 feet, mixed lengths, S1S.....	16.00
1 by 6, 6 to 20 feet, mixed lengths, S1S or S. L.....	16.50
1 by 8, 6 to 20 feet, mixed lengths, S1S or S. L.....	17.50
1 by 10, 6 to 20 feet, mixed lengths, S1S or S. L.....	17.50
1 by 12, 6 to 20 feet, mixed lengths, S1S or S. L.....	18.00

For selected common add \$3; for D. and M. add \$1.50; for grooved roofing add \$3. Orders for 16, 18, and 20 feet only add \$2. Other orders for specified lengths add \$1 to above prices. Number 2 common boards and shiplap \$3 less when in stock.

Fir common dimensions, S1S1E.	6 feet.	8, 12, 14 feet.	16 feet.	9 to 10, 18 to 20 feet.	22 and 24 feet.	26 to 32 feet.
2 by 3, 2 by 4.....	\$15.50	\$16.50	\$17.50	\$18.50	\$19.50	\$21.50
2 by 6, 2 by 8.....	15.50	16.00	17.00	17.50	18.50	20.00
2 by 10.....	16.00	17.00	17.50	18.00	19.00	21.00
2 by 12.....	16.50	17.50	18.00	18.50	19.50	21.50
2 by 14.....		19.00	19.00	20.00	21.00	22.00
2 by 16.....		20.00	20.00	21.00	22.00	24.00
2 by 18.....		22.00	22.00	23.00	24.00	26.00
2 by 20.....		24.00	24.00	25.00	26.00	28.00

Add 50 cents for every 2 feet over 32 feet long up to 40 feet.

For select common add \$3. S1E or rough same mill base as dressed. For 2 by 4, 2 by 6, or 2 by 8 D. & M. or shiplap add to S1S1E, \$1.50. Hemlock permitted in 2 by 4 and 2 by 6.

FIR COMMON PLANK AND SMALL TIMBERS S1S1E OR S4S.

	8, 12, 14, and 16 feet.	9 to 10, 18 and 20 feet.	22 and 24 feet.	26 to 32 feet.
3 by 3, 3 by 4.....	\$17.00	\$17.50	\$18.50	\$20.50
3 by 6.....	18.00	18.50	19.50	21.50
4 by 4, 4 by 6, 4 by 8.....	18.50	19.50	20.50	22.50
3 by 8.....	18.00	18.50	19.50	21.50
3 by 10, 3 by 12.....	18.50	19.50	20.50	22.50
3 by 14.....	19.00	20.00	21.00	23.00
3 by 16.....	20.00	21.00	22.00	24.00
3 by 18.....	22.00	23.00	24.00	26.00
3 by 20.....	24.00	25.00	26.00	28.00
4 by 10, 4 by 12.....	18.50	19.50	20.50	22.50
4 by 14.....	19.50	20.50	21.50	23.50
4 by 16.....	20.50	21.50	22.50	24.50
4 by 18.....	22.00	23.00	24.00	26.00
4 by 20.....	24.00	25.00	26.00	28.00
6 by 6 to 8 by 8.....	18.00	19.00	20.00	22.00

Add 50 cents for every 2 feet over 32 feet long up to 40 feet.
For selected common add \$3 S1E or rough same mill base as dressed.

FIR TIMBERS, SINGLE CARLOAD LENGTHS.

	32 feet and under.	
	Rough.	S1S1E or S4S.
6 by 10 to 8 by 12.....	\$20.00	\$21.00
6 by 14 to 8 by 14.....	20.50	22.50
6 by 16 to 10 by 16.....	22.00	24.50
6 by 18 to 10 by 18.....	23.00	26.00
6 by 20 to 8 by 20.....	24.50	27.50
6 by 22 to 8 by 22.....	27.50	31.00
6 by 24 to 8 by 24.....	31.00	35.00
10 by 10 to 12 by 12.....	20.00	21.00
10 by 14 to 14 by 14.....	20.50	23.00
10 by 20 to 12 by 20.....	25.00	28.50
10 by 22 to 12 by 22.....	27.00	30.75
10 by 24 to 12 by 24.....	30.00	34.00
12 by 16 to 16 by 16.....	21.50	25.00
12 by 18 to 18 by 18.....	23.50	27.50
14 by 20 to 20 by 20.....	24.50	29.00
14 by 22 to 22 by 22.....	26.50	31.50
14 by 24 to 24 by 24.....	30.00	35.50

FIR, TIMBERS, SINGLE CARLOAD LENGTHS.

For odd or fractional thicknesses add to next less thickness 50 cents. Odd or fractional length timbers ordered shall be counted as of next longer even length. For odd or fractional widths add to next less width \$1. For select common add \$3.

	No. 1.	No. 2.	No. 3.
1 by 4, 10 to 16 feet, V. G. flooring.....	\$37.00	\$34.00	\$28.00
1½ by 4, 6 to 16 feet, V. G. flooring.....	40.50	36.50	30.50

NOTE.—No. 1 and No. 2 V. G. flooring 1 by 4, 6, 7, 8, and 9 feet, \$1 less when in stock; No. 3 V. G., \$2 less. All 4 and 5 feet, \$5 less. Short flooring subject to stock on hand. Specified lengths \$2 extra.

	No. 2 clear and better.	No. 3.
1 by 4, 10 to 16 feet, flat grain flooring.....	\$24.00	\$21.00
1 by 6, 10 to 16 feet, flat grain flooring.....	27.00	25.00

All flat grain flooring 6, 7, 8, and 9 feet, \$2 less. All 4 and 5 feet, \$5 less. Specified lengths, \$2 extra.
No. 2 clear and better; 1½, 1½ or 2 inches, 8 to 12 inches wide, 3 to 16 feet, V. G. fir stepping \$28, or \$28 and nosed, \$45; 14 inch, \$2 extra; specified lengths, \$2 extra.

FIR FINISH NO. 2 AND CLEAR AND BETTER, 6 TO 16 FEET LONG.

	S2S or S4S.	Rough dry.	Rough green.
1 by 4.....	\$34.00	\$32.00	\$30.00
1 by 6.....	35.00	33.00	31.00
1 by 5, 8 and 10 inches.....	36.00	34.00	32.00
1 by 12.....	38.00	36.00	34.00
1½ and 1½ by 4 and 6 inches.....	37.00	35.00	33.00
1½ and 1½ by 8, 10 and 12 inches.....	39.00	37.00	35.00
2 by 4.....	34.00	32.00	30.00
2 by 6.....	35.00	33.00	31.00
2 by 8 and 10 inches.....	36.00	34.00	32.00
2 by 12.....	38.00	36.00	34.00
2½, 3, and 4 inches (green only).....			36.00

For each inch in width over 12 inches add \$1. Specified lengths, \$2 extra.
For selected slash grain add \$10. For vertical grain add \$7.

CEILING.

	No. 2 clear and better.	No. 3 clear.
4 by 4, 10 to 16 feet, C. and E., B. or C. and E. V.....	\$23.00	\$17.50
1 by 4, 10 to 16 feet, C. and E., B. or C. and E. V.....	24.00	21.00

Six to 9 feet, \$3 less; 4 and 5 feet, \$5 less. Specified lengths, \$2 extra.
Fir partition, \$5 more than ceiling. For 6-inch ceiling or partition add \$3.50 to the price of 4-inch.

1 by 6, 10 to 16 feet, drop siding and rustic:	
No. 2 clear and better.....	\$26.00
No. 3 clear.....	23.00

Six to 9 feet, \$3 less; 4 and 5 feet, \$5 less. Specified lengths, \$2 extra. Orders for drop siding patterns other than No. 106 must include the other grade accumulated in working at grade prices.

(June 11, 1919.)

After considering the information submitted by the Federal Trade Commission as to the cost of logging and of manufacturing lumber and the information submitted by the representatives of the loggers and lumber manufacturers of the Pacific Northwest at the hearings held on Monday and Tuesday, June 10 and 11, 1918, at which their request for a readjustment of prices on their products was heard, the price-fixing committee, appointed by the President, has determined upon, by agreement with the said representatives of the loggers and lumber manufacturers of the Pacific Northwest, the following maximum prices for fir logs and fir lumber produced in the Pacific Northwest, which maximum prices shall not be exceeded on any sales and contracts for the sale thereof (for mill shipment) made during a period of three months beginning midnight June 15, 1918, either to the public, to the Government, to Governments of the nations associated with us in the present war, or the railroads, whether by rail or by water shipment:

The maximum price for fir logs in the Pacific Northwest delivered at points where it has been customary to make deliveries to the sawmill operators shall be \$20 per thousand for No. 1 logs, \$16 per thousand for No. 2 logs, and \$12 per thousand for No. 3 logs, scale as to the grade and contents to be determined according to the methods that have been customary in the various districts. Said prices are on a basis of logs up to and including 40 feet in length; logs over 40 feet in length to be priced on same basis for extra lengths as has heretofore been established by custom or (in case of uncertainty or question or variation in the different districts as to past custom, as to point of delivery, method of scaling, or prices for extra lengths) as may be decided by the lumber section of the War Industries Board. In no case shall any greater prices than those mentioned above be allowed for logs during the period mentioned. Any additional cost for log freights occasioned by order No. 28 of the Director General of Railroads to be added to foregoing log prices on logs so affected.

The price of fir ship timbers under the Ferris schedule to the Emergency Fleet Corporation to remain the same as those determined upon by the price-fixing committee March 19, 1918, namely: Item prices that average \$40 per thousand for a complete schedule for both the rough and dressed items, and all sales of lumber for other vessels requiring a schedule of lumber of similar type shall be furnished at not to exceed the same basis of prices.

The prices of fir lumber for aircraft use to remain the same as those now in effect.

The prices of all other items of fir lumber shall be based on the West Coast price list of May 1, 1915, plus additions noted on discount sheet No. 22 of February 15, 1918, on the following items:

All items of No. 3 clear and better.

All items of fir timbers larger than 8 by 8 dimension of all lengths.

All items 3 inches and thicker and 10 inches and wider and plus \$1 per thousand less than discount sheet No. 22 on all remaining items of fir on said lumber list.

Prices on items not covered by above list shall be priced on basis of nearest comparable item.

The custom of delivered prices of lumber to purchasers' destination points shall remain unchanged.

Contracts for sale of logs and of lumber entered into in good faith prior to midnight of June 15, 1918, and enforceable at law will be performed in accordance with their terms, subject, of course, to orders received from the Government which may require priority.

It is imperative that, with the least possible disruption of the industry, the vast war needs of the Government, both direct and indirect, for fir logs and fir lumber be supplied on a fair basis; that an adequate supply and equitable distribution thereof be assured for essential commercial needs; that the movement thereof be facilitated, and that injurious speculation therein be prevented. Therefore the procedure outlined below, by agreement with the representatives of the loggers and lumber manufacturers of the Pacific Northwest, has been adopted for a period of three months beginning midnight June 15, 1918.

The procedure is that each fir logger and each manufacturer of fir lumber in the Pacific Northwest shall—

(1) Make contracts for the sale of his products and accept orders therefor at prices not exceeding the applicable maximum prices, always subject to an option at the applicable maximum prices in favor of the United States or the nominee of the War Industries Board. Under this option, which will cover all fir logs and lumber down to the time of actual delivery to the purchaser, the War Industries Board, to any extent required, will allocate either to the Government or to other essential users. Any balance not so allocated will be released for sale to commercial buyers, but at prices no greater than those determined upon as above set forth.

(2) Comply with the directions of the War Industries Board as issued from time to time with reference to filling commercial requirements in the order of their public importance and to furnishing such information and making such reports as may be required.

(3) Keep up to the best of his ability the production of logs and lumber, so as to insure an adequate supply so long as the war lasts.

(4) Neither reduce the scale of wages now being paid nor change fundamental labor conditions now in force.

The Government will apportion the car supply available for, and arrange for the transportation of, logs and lumber, subject to allocation by the War Industries Board as aforesaid, to the end that injury to the industry due to abnormal war-time conditions be neutralized so far as may be.

Foreign trade, except to the Governments of nations associated with us in the present war, is not to be affected by this ruling.

(June 12, 1918.)

The maximum price for Douglas fir logs in the Pacific Northwest having been fixed by the price-fixing committee of the War Industries Board as follows:

No. 1 grade	\$20.00
No. 2 grade	16.00
No. 3 grade	12.00

It is determined that the above prices constitute the basis for logs up to and including 40 feet in length.

It is further determined that the above prices are net cash upon determination of log scale.

Scale as to grade and contents shall be according to custom, with the exceptions hereinafter noted.

All fir logs, other than those graded No. 1, No. 2, or No. 3, shall be entitled to a maximum price of \$16, with the exception that logs 15 inches and under at top end shall be classified as No. 3 logs and shall be so scaled, priced, and invoiced. This also applies to No. 1, No. 2, and No. 3 graded logs. All coarse, large logs containing defects similar to the No. 3 grade shall be scaled, priced, and invoiced as No. 3 logs.

Custom as to log delivery shall remain unchanged, except as applying to the delivery of logs on Grays Harbor and Willapa Harbor, in the State of Washington, in which districts mills shall absorb towage.

The price of fir logs shall neither directly nor indirectly be added to by any log producer through the compelling of the purchaser to take hemlock logs with the fir logs at any price higher than the then maximum price of No. 3 fir logs. Hemlock logs, when ordered by the purchaser or rafted separately, are not subject to said restriction.

Long logs 42 feet and over.—A long log is to be construed as one 42 feet and longer, 18 inches and over in diameter at the top end, suitable for the manufacture into a square edge and sound timber.

Long-log differentials hereinafter named, in the case of the graded logs, are to be added to the price of a No. 2 log, and in the ungraded logs are to be added to the price of the ungraded \$16 log.

The hereinafter-named differentials on long logs shall only apply when such logs are ordered by the purchaser.

Logs 27 inches and under at top end.—Logs in this class, when specifically ordered in lengths 42 feet and over, carry the differentials enumerated below:

42 to 50 feet.....	\$2.00
52 to 60 feet.....	4.00
62 to 70 feet.....	6.00
72 to 80 feet.....	9.00
82 to 90 feet.....	12.00
92 to 100 feet.....	15.00

Logs 28 inches and over at top end.—

42 to 50 feet.....	\$6.00
52 to 60 feet.....	8.00
62 to 70 feet.....	11.00
72 to 80 feet.....	14.00
82 to 90 feet.....	18.00
92 to 100 feet.....	25.00

Provided the above spread in prices shall be limited as follows:

Logs longer than 60 feet shall take the 60-foot price to the extent of 10 per cent of the raft unless specifically ordered, and when so ordered such longer lengths shall take the regular differentials. In no event shall lengths longer than those ordered above 60 feet in length exceed 10 per cent of the total scale of the raft. All logs over 60 feet in length in excess of 10 per cent of the total contents of the raft shall be invoiced at the base price unless ordered.

Logs over 100 feet in length subject to special rates.

Fir-production board to have authority, under the lumber section of the War Industries Board, in all matters of interpretation of rulings as applied to the scaling of logs and inspection of lumber and other minor points.

(June 15, 1918.)

Government maximum f. o. b. mill base prices for Douglas fir lumber effective midnight June 15, 1918, to midnight September 15, 1918, in accordance with the ruling of the price-fixing committee of the War Industries Board, dated June 11, 1918.

V. G. flooring.	No. 1.	No. 2.	No. 3.
1 by 4, 10 to 16 feet.....	\$42.00	\$39.00	\$33.00
1½ by 4, 6 to 16 feet.....	45.50	41.50	35.50

NOTE.—No. 1 and No. 2 V. G. flooring 1 by 4, 6, 7, 8, and 9 feet, \$1 less when in stock. No. 3 V. G., \$2 less. All 4 and 5 feet, \$5 less. Short flooring subject to stock on hand. Specified lengths, \$2 extra.

Flat grain flooring.	No. 2 clear and better.	No. 3.
1 by 4, 10 to 16 foot.....	\$29.00	\$26.00
1 by 6, 10 to 16 foot.....	32.00	30.00

All flat-grain flooring 6, 7, 8, and 9 feet, \$2 less; all 4 and 5 feet, \$5 less. Specified lengths, \$2 extra.

Ceiling.	No. 2 clear and better.	No. 3 clear.
1 by 4, 10 to 16 feet, C. and E., B. or C. and E. V.....	\$28.00	\$22.50
1 by 4, 10 to 16 feet, C. and E., B. or C. and E. V.....	29.00	26.00

NOTE.—6 to 9 feet, \$3 less; 4 and 5 feet, \$5 less. Specified lengths, \$2 extra. Fir partition \$5 more than ceiling. For 6-inch ceiling or partition add \$3.50 to the price of 4-inch.

Stepping.	No. 2 clear and better.
1½, 1½, or 2 inches, 8 to 12 inches wide, 3 to 16 feet.....	\$50.00

V. G. fir stepping S2S or S2S and nosed.

NOTE.—14 inches, \$2 extra; specified lengths, \$2 extra.

Drop siding and rustic.	No. 2 clear and better.	No. 3 clear.
1 by 6½ foot drop siding and rustic.....	\$31.00	\$28.50

NOTE.—6 to 9 feet, \$3 less, 4 and 5 feet, \$5 less. Specified lengths, \$2 extra. Orders for drop siding patterns other than No. 106 must include the other grade accumulated in working at grade prices.

FIR FINISH NO. 2 CLEAR AND BETTER, 6 TO 16 FEET LONG.

	S2S or S4S.	Rough dry.	Rough green.
1 by 4.....	\$39.00	\$37.00	\$35.00
1 by 6.....	40.00	38.00	36.00
1 by 5, 8 inches and 10 inches.....	41.00	39.00	37.00
1 by 12.....	43.00	41.00	39.00
1½ and 1½ by 4 and 6 inches.....	42.00	40.00	38.00
1½ and 1½, 5, 8, 10, and 12 inches.....	44.00	42.00	40.00
2 by 4.....	39.00	37.00	35.00
2 by 6.....	40.00	38.00	36.00
2 by 8 and 2 by 10.....	41.00	39.00	37.00
2 by 12.....	43.00	41.00	39.00
2½, 3, and 4 inches (green only).....			41.00

NOTE.—For each inch in width over 12 inches add \$1. Specified lengths \$2 extra. For selected slash grain add \$10. For vertical grain add \$7.

Foregoing prices on uppers are based on loading not less than 85 per cent 10 feet and longer; balance shorter, usual lengths, well proportioned.

FIR, COMMON BOARDS, S1S OR SHIPLAP.

1 by 2, 6 to 20 feet mixed lengths, S1S.....	\$20.00
1 by 3, 6 to 20 feet mixed lengths, S1S.....	20.00
1 by 4, 6 to 20 feet mixed lengths, S1S.....	18.00
1 by 6, 6 to 20 feet mixed lengths, S1S or S. L.....	18.50
1 by 8, 6 to 20 feet mixed lengths, S1S or S. L.....	19.50
1 by 10, 6 to 20 feet mixed lengths, S1S or S. L.....	19.50
1 by 12, 6 to 20 feet mixed lengths, S1S.....	20.00

For selected common, add \$3; for D. and M., add \$1.50; for grooved roofing, add \$2. Orders for 16, 18, and 20 feet only, add \$2. Other orders for specified lengths, add \$1 to above prices. No. 2 common boards and shiplap, \$3 less when in stock.

FIR, COMMON DIMENSION, S1S1E.

	6 feet.	8, 12, and 14 feet.	16 feet.	9, 10, 18, and 20 feet.	22 and 24 feet.	26 to 32 feet.
2 by 3 and 2 by 4.....	\$17.50	\$18.50	\$19.50	\$20.50	\$21.50	\$22.50
2 by 6 and 2 by 8.....	17.50	18.00	19.00	19.50	20.50	22.00
2 by 10.....	18.00	19.00	19.50	20.00	21.00	23.00
2 by 12.....	18.50	19.50	20.00	20.50	21.50	23.50
2 by 14.....		21.00	21.00	22.00	23.00	25.00
2 by 16.....		22.00	22.00	23.00	24.00	26.00
2 by 18.....		24.00	24.00	25.00	26.00	28.00
2 by 20.....		25.00	25.00	27.00	28.00	30.00

Add 50 cents for every 2 feet over 32 feet long up to 40 feet. For select common, add \$3. S1E or rough, same mill base as dressed. For 2 by 4, 2 by 6, or 2 by 8 D. and M. or shiplap, add to S1S1E, \$1.50. Hemlock permitted in 2 by 4 and 2 by 6.

FIR COMMON PLANK AND SMALL TIMBERS S1S1E OR S4S.

	8, 12, 14, and 16 feet.	9, 10, 18, and 20 feet.	22 and 24 feet.	26 to 32 feet.
2 by 3, and 3 by 4.....	\$21.00	\$21.50	\$22.50	\$24.50
3 by 6.....	22.00	22.50	23.50	25.50
3 by 8.....	22.00	22.50	23.50	25.50
4 by 4, 4 by 6, 4 by 8.....	23.50	25.50	24.50	26.50
6 by 6 to 8 by 8.....	22.00	23.00	24.00	26.00
3 by 10 and 3 by 12.....	23.50	24.50	25.50	27.50
3 by 14.....	24.00	25.00	26.00	28.00
3 by 16.....	25.00	26.00	27.00	29.00
3 by 18.....	27.00	28.00	29.00	31.00
3 by 20.....	29.00	30.00	31.00	33.00
4 by 10 and 4 by 12.....	23.50	24.50	25.50	27.50
4 by 14.....	24.50	25.50	26.50	28.50
4 by 16.....	25.50	26.50	27.50	29.50
4 by 18.....	27.00	28.00	29.00	31.00
4 by 20.....	29.00	30.00	31.00	33.00

Add 50 cents for every 2 feet over 32 feet long up to 40 feet.
For selected common add \$3 S1E or rough same mill base as dressed.

FIR TIMBERS SINGLE CARLOAD LENGTHS.

	32 feet and under.		34 to 40 feet.	
	Rough.	S1S1E or S4S.	Rough.	S1S1E or S4S.
6 by 10 to 8 by 12.....	\$25.00	\$26.00	\$27.00	\$28.50
6 by 14 to 8 by 14.....	26.50	27.50	27.50	30.00
6 by 16 to 10 by 16.....	27.00	29.50	29.00	32.00
6 by 18 to 10 by 18.....	28.00	31.00	31.00	34.50
6 by 20 to 8 by 20.....	29.50	32.50	32.50	36.00
6 by 22 to 8 by 22.....	32.50	36.00	36.50	40.50
6 by 24 to 8 by 24.....	36.00	40.00	42.00	45.50
10 by 10 to 12 by 12.....	25.00	26.00	27.00	29.50
10 by 14 to 14 by 14.....	25.50	28.00	27.50	30.50
10 by 20 to 12 by 20.....	30.00	33.50	33.00	36.00
10 by 22 to 12 by 22.....	32.00	35.75	36.00	40.25
10 by 24 to 12 by 24.....	36.00	39.00	39.50	44.00
12 by 16 to 16 by 16.....	26.50	30.00	28.50	32.50
12 by 18 to 18 by 18.....	28.50	32.50	30.50	35.00
14 by 20 to 20 by 20.....	29.50	34.00	32.50	36.50
14 by 22 to 22 by 22.....	31.50	36.50	35.50	41.00
14 by 24 to 24 by 24.....	35.00	40.50	39.50	45.50

FIR TIMBERS REQUIRING TWO OR MORE CARS.

	42 to 44 feet.		46 to 50 feet.		52 to 54 feet.		56 to 60 feet.	
	Rough.	S1S1E or S4S.	Rough.	S1S1E or S4S.	Rough.	S1S1E or S4S.	Rough.	S1S1E or S4S.
6 by 6 to 8 by 12.....	\$29.50	\$31.25	\$31.75	\$33.75	\$33.75	\$36.00	\$36.75	\$39.25
6 by 14 to 8 by 14.....	30.00	32.75	32.25	35.25	34.25	37.50	37.25	40.75
6 by 16 to 10 by 16.....	31.50	34.75	33.75	37.25	35.75	39.50	38.75	42.75
6 by 18 to 10 by 18.....	34.00	37.75	37.00	41.00	40.00	44.25	44.50	49.00
6 by 20 to 8 by 20.....	35.50	39.25	38.50	42.50	41.50	45.75	46.00	50.50
6 by 22 to 8 by 22.....	39.50	43.75	42.50	47.00	45.50	50.25	50.00	55.00
6 by 24 to 8 by 24.....	45.00	49.75	48.00	53.00				
10 by 10 to 12 by 12.....	29.50	32.25	31.75	34.75	33.75	37.00	36.75	40.25
10 by 14 to 14 by 14.....	30.00	33.25	32.25	35.75	34.25	38.00	37.25	41.25
10 by 20 to 12 by 20.....	36.00	40.25	39.00	43.50	42.00	46.75	46.50	51.50
10 by 22 to 12 by 22.....	39.00	43.50	42.00	46.75	45.00	50.00	49.50	54.75
10 by 24 to 12 by 24.....	42.50	47.25	45.50	50.50	48.50	53.75	53.00	58.50
12 by 16 to 16 by 16.....	31.00	35.25	33.25	37.75	35.25	40.00	38.25	43.25
12 by 18 to 18 by 18.....	33.50	38.25	36.50	41.50	39.50	44.75	44.00	49.50
14 by 20 to 20 by 20.....	35.50	40.75	38.50	44.00	41.50	47.25	46.00	52.00
14 by 22 to 22 by 22.....	38.50	44.25	41.50	47.50	44.50	50.75	49.00	55.50
14 by 24 to 24 by 24.....	42.50	48.75	45.50	52.00	48.50	55.25	53.00	60.00

For odd or fractional thicknesses add to next less thickness 50 cents. Odd or fractional length timbers ordered shall be counted as of next longer even length. For odd or fractional widths add to next less width \$1. For select common add \$3. For price on lengths longer than 60 feet add \$11 per thousand to f. o. b. mill price as contained in west coast price list of May 1, 1915.

Inspection at mill. Grades in accordance with West Coast Lumberman's Association grading rules, rail A list issued January 1, 1917.

GOVERNMENT PRICE LIST F. O. B. MILL, COVERING DOUGLAS FIR FOR RAILROAD AND CAR MATERIAL, AS APPROVED BY DIRECTOR OF LUMBER, OCTOBER 12, 1918.

(1)	Cross-ties.	(1)	Bridge ties surfaced.
6 by 8.....	\$19.00	6 by 8.....	\$20.00
7 by 8.....	20.00	7 by 8 and 8 by 8.....	21.00
7 by 9.....	21.00	7 by 9.....	22.00

¹ For switch ties add \$1.50 per 1,000 to cross-tie prices.

Bridgestrangers.	Common rough.	Surfaced.	Select common.	Select common, surfaced.
6 by 16 to 10 by 16-32 and under.....	\$27.00	\$29.50	\$30.00	\$32.50
6 by 18 to 18 by 18 and under.....	28.00	31.00	31.00	34.00
6 by 20 to 8 by 20 and under.....	29.50	32.50	32.50	35.50
6 by 22 to 8 by 22 and under.....	32.50	36.00	35.50	39.00
6 by 24 to 8 by 24 and under.....	36.00	40.00	39.00	43.00
10 by 20 to 12 by 20 and under.....	30.00	33.50	33.00	36.50
10 by 22 to 12 by 22 and under.....	32.00	35.75	35.00	38.75
10 by 24 to 12 by 24 and under.....	35.00	39.00	38.00	42.00

Weight: Rough, 3,300 pounds; S1S1E or S4S, 3,000 pounds. For odd or fractional thickness add to next less thickness 50 cents. Odd or fractional length timbers ordered shall be counted as of next longer even length. For odd or fractional widths add to next less width \$1.

NOTE.—Lengths 34 to 40, add regular timber list spread.

Car sills.	34-foot.	35 to 40 foot.	41 to 45 foot.
Common rough.....	\$29.00	\$31.00	\$36.00
S4S.....	31.00	33.50	38.50

NOTE.—For select common add \$3 per 1,000.

STANDARD CAR DECKING AND END LINING (SURFACED).

	Common.	Select common.	No. 2 clear and better, F. G. K. D.	No. 2 clear and better, V. G. K. D.
2 by 6 to 2 by 10 ¹	\$21.00	\$24.00	\$41.00	\$48.00
2½-inch and thicker.....			44.00	51.00

¹\$1.50 less for rough stock.

STANDARD CAR FRAMING, FACIA AND RUNNING BOARD.

	Rough.		Surfaced.	
	Common.	Select common.	Common.	Select common.
2 by 12 and smaller, ½-inch surfacing.....	\$24.00	\$27.00	\$26.00	\$29.00
Larger sizes, ½ inch surfacing	26.00	29.00	28.00	31.00

INSULATION.

¾ by 4 and ¾ by 6, 4 to 20 feet, No. 1 common, \$15.50 ; select common, \$17.50.
NOTE.—Surface measurement .

STANDARD CAR SIDING.

1 by 4, No. 2 and better, V. G., K. D., S1S, S2S, or worked..... \$44.00
1 by 4, No. 2 and better, F. G., S1S, S2S, or worked..... 34.00
1 by 6, No. 2 and better, V. G., S1S, S2S, or worked..... 46.00
1 by 6, No. 2 and better, F. G., S1S, S2S, or worked..... 35.50
NOTE.—Fractional lengths shall be counted as the next longer odd or even foot in length ; 15 per cent of No. 3 grade accumulated in manufacturing \$5 per thousand less ; rough green stock \$4 less ; rough dry stock \$2 less.

STANDARD CAR LINING AND ROOFING.

1 by 4, No. 2 and better, S. G. (S1S, S2S, or worked), random lengths..... \$34.00
1 by 4, No. 2 and better, S. G. (S1S, S2S, or worked), specified..... 26.00
1 by 6, No. 2 and better, S. G. (S1S, S2S, or worked), random lengths..... 35.50
1 by 6, No. 2 and better (S1S, S2S, or worked), specified..... 37.50
1½ and 1½ by 8, No. 2 and better, S. G. (S1S, S2S, or worked), random lengths.. 43.00
1½ and 1½ by 8, No. 2 and better, S. G. (S1S, S2S, or worked), specified..... 45.00
NOTE.—No. 3 grade accumulated in manufacture at \$5 per thousand less ; rough green stock \$4 less ; rough dry stock \$2 less ; V. G. add \$9.

HORIZONTAL SHEATHING (KILN-DRIED WORKED).

2 by 4, No. 2 and better, S. G..... \$42.50
2 by 6, No. 2 and better, S. G..... 43.50
NOTE.—V. G. add \$7 ; rough green stock \$4 less ; rough dry stock \$2 less.
Timbers, boards, dimensions, shiplap, and other miscellaneous requirements at prices approved for Government purchases. All grading and surfacing to be in accordance with West Coast Lumbermen's Association standard classification grading and dressing rules, January 1, 1917, for general requirements. August 1, 1917, for car material.

MAHOGANY LUMBER.

An informal agreement as to a fair and reasonable price for mahogany lumber, propeller quality, was entered into in March, 1918, between mahogany producers and the bureau of aircraft production. The price agreed upon was \$350 per thousand feet. It remained unchanged throughout the period of the war.

NEW ENGLAND SPRUCE.

An average price of \$33 per thousand was reached by agreement between the manufacturers of New England spruce and the lumber committee of the Council of National Defense in June, 1917.

A new schedule, approved by the price-fixing committee on April 12, 1918, showed an increase to about \$40 per thousand board feet.¹

The Federal Trade Commission investigated costs in the industry, and a new price list was issued July 17, 1918. This applied to all purchasers of spruce lumber and showed another increase of \$8 per thousand board feet on all items.

The schedules of July, 1918, were effective until November 1, 1918, and were then extended to December 1, 1918, when control ceased.

(Apr. 12, 1918, to July 1, 1918.)

Prices quoted in the schedule below are on United States Government orders for merchantable spruce lumber in orders of substantial size, for carload lot shipments. Prices are effective from April 12, 1918, to July 1, 1918. For further information inquire of New England spruce emergency bureau, 131 State Street, Boston, Mass.

Sizes.	Lengths (feet).	Prices (per M feet).	Sizes.	Lengths (feet).	Prices (per M feet).
2 by 2.....	8-20 feet.....	\$40.00	1 by 4.....	8-20 feet.....	\$40.00
2 by 3 planed 1 edge.....	do.....	40.00	1 by 5.....	do.....	40.00
2 by 4 planed 1 edge.....	do.....	40.00	1 by 6.....	do.....	40.00
2 by 5.....	do.....	40.00	1 by 7.....	do.....	40.00
2 by 6.....	do.....	40.00	1 by 8.....	do.....	40.00
2 by 7.....	do.....	40.00	1 by 9.....	do.....	45.00
2 by 8.....	do.....	40.00	1 by 10.....	do.....	50.00
2 by 9.....	do.....	45.00	1 by 12.....	do.....	55.00
2 by 10.....	do.....	50.00	1½ or 1½ by 4.....	do.....	40.00
2 by 12.....	do.....	52.00	1½ or 1½ by 5.....	do.....	40.00
3 by 4 planed 1 edge.....	do.....	40.00	1½ or 1½ by 6.....	do.....	40.00
3 by 5.....	do.....	40.00	1½ or 1½ by 7.....	do.....	40.00
3 by 6.....	do.....	40.00	1½ or 1½ by 8.....	do.....	40.00
3 by 7.....	do.....	40.00	1½ or 1½ by 9.....	do.....	45.00
3 by 8.....	do.....	40.00	1½ or 1½ by 10.....	do.....	50.00
3 by 9.....	do.....	45.00	1½ or 1½ by 12.....	do.....	55.00
3 by 10.....	do.....	50.00	2 by 2.....	Random lengths	35.00
3 by 12.....	do.....	52.00	2 by 3.....	do.....	35.00
4 by 4.....	do.....	40.00	2 by 4.....	do.....	35.00
4 by 5.....	do.....	40.00	3 by 4 or 4 by 4.....	do.....	38.00
4 by 6.....	do.....	40.00	All other 8-inch and	do.....	40.00
4 by 7.....	do.....	40.00	under sizes.		
4 by 8.....	do.....	40.00	2 by 9.....	do.....	43.00
4 by 9.....	do.....	45.00	2 by 10.....	do.....	45.00
4 by 10.....	do.....	50.00	2 by 12.....	do.....	48.00
4 by 12.....	do.....	52.00	1 by 4.....	do.....	40.00
5 by 5.....	do.....	40.00	1 by 5.....	do.....	40.00
5 by 6.....	do.....	40.00	1 by 6.....	do.....	40.00
6 by 7.....	do.....	40.00	1 by 7.....	do.....	40.00
5 by 8.....	do.....	40.00	1 by 8.....	do.....	40.00
5 by 9.....	do.....	45.00	1 by 9.....	do.....	45.00
5 by 10.....	do.....	50.00	1½ by 9.....	do.....	45.00
5 by 12.....	do.....	52.00	1½ by 9.....	do.....	45.00
6 by 6.....	do.....	40.00	1 by 10.....	do.....	50.00
6 by 7.....	do.....	40.00	1½ by 10.....	do.....	50.00
6 by 8.....	do.....	40.00	1½ by 10.....	do.....	50.00
6 by 9.....	do.....	45.00	1 by 12.....	do.....	55.00
6 by 10.....	do.....	50.00	1½ by 12.....	do.....	55.00
6 by 12.....	do.....	52.00	1½ by 12.....	do.....	55.00
7 by 7.....	do.....	40.00		Any quantity	
7 by 8.....	do.....	40.00		any length.	
7 by 9.....	do.....	45.00	1 by 2 or 1 by 3 planed	8-20 feet.....	40.00
7 by 10.....	do.....	50.00	1 side.		
7 by 12.....	do.....	52.00	1 by 2 or 1 by 3 planed	Random lengths	35.00
8 by 8.....	do.....	40.00	1 side.		
8 by 9.....	do.....	45.00	1 by 4 to 8 planed 1 side.	Random widths	38.00
8 by 10.....	do.....	50.00		and lengths.	
8 by 12.....	do.....	52.00	1 by 4 to 8 planed 2 sides,	Random lengths	40.00
			planed 1 or 2 sides and		
			matched, planed,		
			matched and beaded,		
			or planed 4 sides.		

Where the fractional part of a foot is specified, the stock is to be figured the next foot in length.

For every 2 feet or fraction over 20 feet add \$1 per M.

¹ Price Fixing Committee Minute Book II, Apr. 11-12, 1918.

All prices in the rough unless otherwise specified above.

For planing 1 side, add.....	\$0.50
For planing 2 sides, add.....	1.00
For planing 1, 2 sides and matching or grooving and planing 4 sides, add.....	1.50
For beading, add.....	.50

The above prices are quoted with the understanding that the Government will endeavor to give a fair assortment of widths and lengths on their orders and that we should not be called upon to furnish all 8-inch and wider on any job unless we furnish the narrow widths and short lengths needed for same job.

Any order submitted not in accordance with our interpretation of the above statement, we reserve the right to make additional charge, according to manufacturing and market conditions at that time, for furnishing such schedules. If such charge is not agreeable to the Government cancellation may be made within a reasonable length of time after notification to the Government, say, 10 days.

These prices allow the present rate of freight to Boston, Mass. They do not include the 3 per cent tax on freight bills. In adjustment of freight differentials, the Bangor & Aroostook Railroad lumber tariff to govern. All freight rates subject to change in accordance with changes of present railroad rates.

Terms of settlement: One per cent discount for cash 15 days from date of shipment, eastern merchantable inspection to govern.

For deliveries other than Boston, add following arbitraries:

	Per M. feet.
Albany, via Delaware & Hudson.....	\$0.75
Schenectady, via Delaware & Hudson.....	.75
South Boston.....	1.00
Philadelphia.....	3.75
Wilmington.....	3.75
Newark.....	3.75
Baltimore.....	3.75
Bristol, Pa.....	3.75
Troy, N. Y.....	.25
Albany and Schenectady, via New York Central.....	1.25

The prices quoted to remain in effect until July 1, 1918, or such prior time as the Federal Trade Commission have completed an investigation of cost of manufacturing lumber in the New England district and is prepared to submit their findings to the price-fixing committee of the War Industries Board, at which time these prices may be subject to revision.

(July 19, 1918.)

After considering the information submitted by the Federal Trade Commission as to the cost of manufacturing New England spruce lumber, and the information submitted by the representatives of the manufacturers thereof at the hearings held on the 18th of July, 1918, at which their request for a readjustment of prices on their products was heard, the price-fixing committee appointed by the President has determined, by agreement with the said representatives of the manufacturers of New England spruce lumber, upon the following maximum prices for such lumber. These maximum prices shall not be exceeded on any sales and contracts for sale (for mill shipment) made by the manufacturer, dealer, or other person during a period beginning midnight July 19, 1918, and ending midnight November 1, 1918, to the Government, to the Governments of the nations associated with us in the present war, to the railroads, or to such others as customarily purchase lumber for mill shipment, whether by rail or by water.

The prices of all New England spruce lumber in the States of Maine, New Hampshire, Vermont, and Massachusetts shall not exceed the item prices named in attached list. These prices are for New England spruce lumber delivered (freight allowed) to Boston, Mass. They do not include war tax on freight bills. For shipments to other destination points, freight adjustments will be governed by differentials shown in Bangor & Aroostook Railway lumber tariff on basis of 3,000 pounds weight to 1,000 feet of lumber.

Prices on items not covered by above list shall be priced on basis of nearest comparable item.

The usual trade practices shall continue, including cash discount of 1 per cent in 15 days or 30 days net.

Contracts for the sale of lumber entered into in good faith prior to midnight July 19, 1918, and enforceable at law, will be performed in accordance with their terms, subject, of course, to orders received from the Government which may require priority.

It is imperative that with the least possible disruption of the industry the vast war needs of the Government, both direct and indirect, for New England spruce lumber be supplied on a fair basis, that an adequate supply and equitable distribution thereof be assured for essential commercial needs, that the movement thereof be facilitated, and that injurious speculation therein be prevented. Therefore the procedure outlined below, by agreement with the representatives of the manufacturers of New England spruce lumber, has been adopted for a period beginning midnight July 19, 1918, and ending midnight November 1, 1918.

The procedure is that each manufacturer of New England spruce lumber shall—

(1) Make contracts and accept orders for his product at prices not in excess of the applicable maximum prices, always subject to an option at the applicable maximum prices in favor of the United States or the nominee of the War Industries Board. Under this option, which will cover all New England spruce lumber down to time of actual delivery to the purchaser, the War Industries Board to any extent required will allocate either to the Government or to other essential users. Any balance not so allocated will be released for sale to commercial buyers, but at prices no greater than those determined upon as above set forth.

(2) Comply with the directions of the War Industries Board, as issued from time to time, with reference to filling commercial requirements in the order of their public importance and to furnish such information and making such reports as may be required.

(3) Keep up to the best of his ability the production of spruce lumber so as to insure an adequate supply so long as the war lasts.

(4) Neither reduce the scale of wages now being paid nor change fundamental labor conditions now in force.

The Government will apportion the car supply available for lumber and arrange for its transportation, subject to allocation by the War Industries Board as aforesaid, to the end that injury to the industry due to abnormal war-time conditions be neutralized so far as may be.

Foreign trade, except to the governments of nations associated with us in the present war, is not to be affected by this ruling.

(July 19, 1918.)

Maximum prices on New England merchantable spruce lumber delivered (freight allowed) to Boston, Mass. They do not include war tax on freight bills. For shipments to other destination points freight adjustments will be governed by differentials shown in Bangor & Aroostook Railroad lumber tariff on basis of 3,000 pounds weight to 1,000 feet of lumber. Effective midnight July 19, 1918, to and including November 1, 1918.

DIMENSION.

[Specified lengths 20 feet and under.]

Sizes.	Prices.	Sizes.	Prices.
1 by 2, D18 to $\frac{1}{2}$ inch.....	\$48.00	1 by 9.....	\$53.00
1 by 3, D18 to $\frac{1}{2}$ inch.....	48.00	1 by 10.....	58.00
1 by 4.....	48.00	1 by 12.....	60.00
1 by 5.....	48.00	1 $\frac{1}{2}$ or 1 $\frac{1}{2}$ by 4.....	48.00
1 by 6.....	48.00	1 $\frac{1}{2}$ or 1 $\frac{1}{2}$ by 5.....	48.00
1 by 7.....	48.00	1 $\frac{1}{2}$ or 1 $\frac{1}{2}$ by 6.....	48.00
1 by 8.....	48.00	1 $\frac{1}{2}$ or 1 $\frac{1}{2}$ by 7.....	48.00

DIMENSION—Continued.

Sizes.	Prices.	Sizes.	Prices.
1 or 1 by 8.....	\$48.00	4 by 8.....	\$48.00
1 or 1 by 9.....	53.00	4 by 9.....	53.00
1 or 1 by 10.....	58.00	4 by 10.....	58.00
1 or 1 by 12.....	60.00	4 by 12.....	60.00
2 by 2.....	48.00	5 by 5.....	48.00
2 by 3, D1E to 2 1/2 inches.....	48.00	5 by 6.....	48.00
2 by 4, D1E to 3 1/2 inches.....	48.00	5 by 7.....	48.00
2 by 5.....	48.00	5 by 8.....	48.00
2 by 6.....	48.00	5 by 9.....	53.00
2 by 7.....	48.00	5 by 10.....	58.00
2 by 8.....	48.00	5 by 12.....	60.00
2 by 9.....	53.00	6 by 6.....	48.00
2 by 10.....	58.00	6 by 7.....	48.00
2 by 12.....	60.00	6 by 8.....	48.00
3 by 4, D1E to 3 1/2 inches.....	48.00	6 by 9.....	53.00
3 by 5.....	48.00	6 by 10.....	58.00
3 by 6.....	48.00	6 by 12.....	60.00
3 by 7.....	48.00	7 by 7.....	48.00
3 by 8.....	48.00	7 by 8.....	48.00
3 by 9.....	53.00	7 by 9.....	53.00
3 by 10.....	58.00	7 by 10.....	58.00
3 by 12.....	60.00	7 by 12.....	60.00
4 by 4.....	48.00	8 by 8.....	48.00
4 by 5.....	48.00	8 by 9.....	53.00
4 by 6.....	48.00	8 by 10.....	58.00
4 by 7.....	48.00	8 by 12.....	60.00

All above prices are for rough lumber unless otherwise specified.
Where the fractional part of a foot is specified, the stock is to be figured the next foot in length.
For every two feet or fraction over 20 feet add \$1 per thousand.

RANDOM LENGTHS.

Sizes.	Prices.	Sizes.	Prices.
1 by 2, D1S to 1/2 inch.....	\$38.00	2 by 2.....	\$36.50
1 by 3, D1S to 1/2 inch.....	38.00	2 by 3, D1E to 2 1/2 inches.....	36.50
1 by 4.....	42.00	2 by 4, D1E to 3 1/2 inches.....	38.00
1 by 5.....	42.00	2 by 5.....	38.00
1 by 6.....	45.00	2 by 6.....	38.00
1 by 7.....	45.00	2 by 7.....	38.00
1 by 8.....	45.00	2 by 8.....	43.00
1 by 9.....	50.00	2 by 9.....	45.00
1 by 10.....	55.00	2 by 10.....	50.00
1 by 12.....	59.00	2 by 12.....	55.00
1 or 1 by 4.....	45.00	3 by 4, D1E to 3 1/2 inches.....	40.00
1 or 1 by 5.....	45.00	3 by 9.....	45.00
1 or 1 by 6.....	45.00	3 by 10.....	50.00
1 or 1 by 7.....	45.00	3 by 12.....	55.00
1 or 1 by 8.....	45.00	4 by 4.....	40.00
1 or 1 by 9.....	50.00	4 by 9.....	45.00
1 or 1 by 10.....	55.00	4 by 10.....	50.00
1 or 1 by 12.....	59.00	4 by 12.....	55.00

All 8 inches and under sizes, random lengths, including timber, not specified above, \$43.
All above prices are for rough lumber unless otherwise specified.

For planing 1 side add.....	per M..	\$0.50
For planing 2 sides add.....	do....	1.00
For planing 1 or 2 sides and matching or grooving add.....	do....	1.50
For beading, extra.....	do....	.50
For planing 4 sides add.....	do....	1.50
1 by 4 to 8, planed 1 side, random widths and lengths.....		41.00
1 by 5 and up, planed and matched, random widths and lengths.....		43.50
1 by 5 and up, planed and matched, random widths, all even lengths, 10 to 18 feet.....		47.00
Shiplap 5, 6, and 7 inches, random lengths.....		46.00
Shiplap 8 inches, random lengths.....		48.00

Prices on items not covered by above list shall be priced on basis of nearest comparable item.
Terms of settlement: One per cent discount for cash within 15 days or 30 days net from date of shipment; eastern merchantable inspection to govern.
All freight rates subject to change up or down according to any changes by railroads in present rates.

Sizes.	Lengths (any quantity any length).	Prices (per M feet).
1 by 2 or 1 by 3.....	Planed 1 side, 8 to 20 feet.....	\$40
Do.....	Planed random lengths.....	35
1 by 4 to 8.....	Planed random widths and lengths.....	38
Do.....	Planed 2 sides.....	-----
	Planed 1 or 2 sides and matched, planed, matched and beaded, or planed 4 sides random lengths.....	40

Where the fractional part of a foot is specified the stock is to be figured the next foot in length.

For every 2 feet or fraction over 20 feet add \$1 per thousand.

The above prices are quoted with the understanding that the Government will endeavor to give a fair assortment of widths and lengths on their orders and that we should not be called upon to furnish all 8-inch and wider on any job unless we furnish the narrow widths and short lengths needed for same job.

On any order submitted not in accordance with our interpretation of the above statement we reserve the right to make additional charge, according to manufacturing and market conditions at that time, for furnishing such schedules. If such charge is not agreeable to the Government, cancellation may be made within a reasonable length of time after notification to the Government, say 10 days.

These prices allow the present rate of freight to Boston, Mass. They do not include the 3 per cent tax on freight bills. In adjustment of freight differentials the Bangor & Aroostook Railroad lumber tariff to govern.

Terms of settlement: One per cent discount for cash 15 days from date of shipment, eastern merchantable inspection to govern.

For deliveries other than Boston add following arbitraries:

	Per thousand feet.
Albany via Delaware & Hudson.....	\$0.75
Schenectady via Delaware & Hudson.....	.75
South Boston.....	1.00
Philadelphia.....	3.75
Wilmington.....	3.75
Newark.....	3.75
Baltimore.....	3.75
Bristol, Pa.....	3.75
Troy, N. Y.....	.25
Albany and Schenectady via New York Central.....	1.25

Add 25 cents per thousand right through to above prices, occasioned by advance in freight rate of 1 cent per hundredweight, Bangor & Aroostook Railroad, supplement No. 7 to I. C. C. No. 1133, effective April 20, 1918. All prices in the rough unless otherwise specified above.

	Per thousand feet.
For planing 1 side, add.....	\$0.50
For planing 2 sides, add.....	1.00
For planing 1, 2 sides, and matching or grooving and planing 4 sides, add.....	1.50
For beading, add.....	.50

NORTH CAROLINA PINE.

The first price schedules for North Carolina pine were those made by informal agreement with the North Carolina pine emergency bureau. They were prices to the Government only and were effective from April 8, 1918, to June 5, 1918.

On June 28, 1918, the price-fixing committee announced a slight advance in price, showing an increase of \$1 per thousand on No. 4 flooring and \$2 per thousand on No. 4 ceiling and partition, the basic price being \$29.50. These prices were effective until September 30, 1918.

On October 1, 1918, the existing schedules were extended to December 31, 1918, when control ended.

(Apr. 8 to June 5, 1918.) *

[All prices f. o. b. Norfolk or Richmond (Virginia gates).]

Width and lengths. ¹	Price.	Width and lengths. ¹	Price.
2 by 2, 10 feet.....	\$30.00	2 by 8, 10 feet.....	\$28.50
2 by 2, 12 feet.....	28.00	2 by 8, 12 feet.....	26.50
2 by 2, 14 feet.....	28.00	2 by 8, 14 feet.....	26.50
2 by 2, 16 feet.....	28.00	2 by 8, 16 feet.....	26.50
2 by 2, 18 feet.....	30.00	2 by 8, 18 feet.....	28.50
2 by 2, 20 feet.....	30.00	2 by 8, 20 feet.....	28.50
2 by 2, 22 feet.....	31.50	2 by 8, 22 feet.....	30.00
2 by 2, 24 feet.....	31.50	2 by 8, 24 feet.....	30.00
2 by 3, 10 feet.....	27.50	2 by 10, 10 feet.....	29.00
2 by 3, 12 feet.....	26.50	2 by 10, 12 feet.....	27.00
2 by 3, 14 feet.....	26.50	2 by 10, 14 feet.....	27.00
2 by 3, 16 feet.....	26.50	2 by 10, 16 feet.....	27.00
2 by 3, 18 feet.....	27.50	2 by 10, 18 feet.....	29.00
2 by 3, 20 feet.....	27.50	2 by 10, 20 feet.....	29.00
2 by 3, 22 feet.....	29.00	2 by 10, 22 feet.....	30.50
2 by 3, 24 feet.....	29.00	2 by 10, 24 feet.....	30.50
2 by 4, 10 feet.....	29.00	2 by 12, 10 feet.....	29.50
2 by 4, 12 feet.....	27.00	2 by 12, 12 feet.....	29.00
2 by 4, 14 feet.....	27.00	2 by 12, 14 feet.....	29.00
2 by 4, 16 feet.....	27.00	2 by 12, 16 feet.....	29.00
2 by 4, 18 feet.....	29.00	2 by 12, 18 feet.....	29.50
2 by 4, 20 feet.....	29.00	2 by 12, 20 feet.....	30.50
2 by 4, 22 feet.....	30.50	2 by 12, 22 feet.....	32.00
2 by 4, 24 feet.....	30.50	2 by 12, 24 feet.....	32.00
2 by 6, 10 feet.....	26.50	2 by 2 random, 8 to 16 feet.....	28.00
2 by 6, 12 feet.....	25.50	2 by 3 random, 8 to 16 feet.....	26.50
2 by 6, 14 feet.....	25.50	2 by 4 random, 8 to 16 feet.....	27.00
2 by 6, 16 feet.....	25.50	2 by 6 random, 8 to 16 feet.....	25.50
2 by 6, 18 feet.....	26.50	2 by 8 random, 8 to 16 feet.....	26.50
2 by 6, 20 feet.....	26.50	2 by 10 random, 8 to 16 feet.....	27.00
2 by 6, 22 feet.....	28.00	2 by 12 random, 8 to 16 feet.....	29.00
2 by 6, 24 feet.....	28.00		

¹ Dimensions S1S1E.

For D. & M. or shiplap add \$1 per thousand feet. For S4S add 50 cents. For dimensions over 24 feet add \$1 for each 2 feet up to and including 32 feet.

The above prices are for simple working, now standard in manufacture.

All above items 50 cents per thousand less if rough.

1 by 3 random lengths, E. G. flooring No. 2.....	\$51.50
1 by 4 random lengths, E. G. flooring No. 2.....	49.50
1 by 4 random lengths, flooring No. 2.....	37.50
1 by 4 random lengths, flooring No. 3.....	34.50
1 by 4 random lengths, flooring No. 4.....	26.50
1 by 6 random lengths, flooring No. 2.....	40.00
1 by 6 random lengths, flooring No. 3.....	35.00
1 by 6 random lengths, flooring No. 4.....	27.50
1 by 3 to 6 inches, random lengths, flooring No. 4.....	27.00
1 by 4 to 6 inches, random lengths, flooring No. 4.....	27.00
1 by 4 random lengths, ceiling No. 2.....	35.50
1 by 4 random lengths, ceiling No. 3.....	32.50
1 by 4 random lengths, ceiling No. 4.....	25.50
1 by 4 random lengths, ceiling No. 2.....	38.50
1 by 4 random lengths, ceiling No. 3.....	35.00
1 by 4 random lengths, ceiling No. 4.....	26.50
1 by 6 random lengths, drop siding No. 2.....	38.50
1 by 6 random lengths, drop siding No. 3.....	34.50
1 by 6 random lengths, drop siding No. 4.....	28.50

Width and length.	Description.	Price.
1 by 4, random lengths.....	Finish, No. 2.....	\$39.00
1 by 6, random lengths.....	do.....	40.50
1 by 8, random lengths.....	do.....	40.50
1 by 10, random lengths.....	do.....	41.50
1 by 12, random lengths.....	do.....	42.50
1 by 4 to 12, random lengths.....	do.....	40.50
1 by 4, random lengths.....	Finish, "C" or No. 3.....	36.50
1 by 6 and 8, random lengths.....	do.....	37.50
1 by 10, random lengths.....	do.....	39.00
1 by 12, random lengths.....	do.....	39.50
1 by 4 to 12, random lengths.....	do.....	37.50
For specified lengths of finish add \$1 per M feet. For S4S add 50 cents; if rough deduct 50 cents.		
1 by 2, random lengths.....	S1S or S2S, No. 3.....	31.50
1 by 3, random lengths.....	do.....	32.50
1 by 4, random lengths.....	do.....	30.50

Width and length.	Description.	Price.
1 by 6, random lengths.....	S1S or S2S, No. 3.....	\$31.50
1 by 8, random lengths.....	do.....	31.50
1 by 10, random lengths.....	do.....	31.50
1 by 12, random lengths.....	do.....	34.50
1 by 2, random lengths.....	S1S or S2S, No. 4.....	26.50
1 by 3, random lengths.....	do.....	27.50
1 by 4, random lengths.....	do.....	25.50
1 by 6, random lengths.....	do.....	26.50
1 by 8, random lengths.....	do.....	27.50
1 by 10, random lengths.....	do.....	27.50
1 by 12, random lengths.....	do.....	29.50
1 by 6 to 12, random lengths.....	do.....	27.50
For specified lengths of 1 inch, No. 3 and No. 4, add 50 cents, except 16-foot add \$1; for D. & M. and shiplap add 50 cents; if S4S add 50 cents.		
1½ by 4 to 10 inches, 10 to 16 feet.....	S2S, No. 2.....	45.50
1½ by 4 to 12 inches, 10 to 16 feet.....	do.....	47.50
1½ by 4 to 10 inches, 10 to 16 feet.....	do.....	45.50
1½ by 12 inches, 10 to 16 feet.....	do.....	47.50
1 by 4, random lengths.....	S1S or S2S, culls, R. Ht.....	22.50
1 by 6, random lengths.....	do.....	23.00
1 by 8, random lengths.....	do.....	23.50
1 by 10, random lengths.....	do.....	23.50
1 by 12, random lengths.....	do.....	24.00
1 by 4 to 12 inches, random lengths.....	do.....	23.00

Add 50 cents to above if S4S, D. & M., or shiplap.
All above items 50 cents less if rough.

Width and lengths.	10 to 20 feet.	22 and 24 feet.	26 feet.	28 feet.	30 feet.	32 feet.
3 by 4 and 4 by 4.....	\$29.50	\$29.50	\$31.50	\$32.50	\$33.50	\$34.50
3 by 6 to 8 by 8.....	28.50	29.50	30.50	31.50	32.50	33.50
3 by 10 and 4 by 10.....	32.50	33.50	34.50	35.50	36.50	37.50
5 by 10 to 10 by 10.....	31.50	32.50	33.50	34.50	35.50	36.50
3 by 12 to 5 by 12.....	34.50	35.50	36.50	37.50	38.50	39.50
6 by 12 to 12 by 12.....	33.50	34.50	35.50	36.50	37.50	38.50
2 by 12 to 5 by 14.....	39.50	40.50	41.50	42.50	43.50	44.50
6 by 14 to 8 by 14.....	38.00	40.00	41.00	42.00	43.00	44.00
10 by 14 to 14 by 14.....	38.50	39.50	40.50	41.50	42.50	43.50

The above prices are for short-leaf dimension.

For merchantable add \$3 per thousand for 10 inches and under.

For merchantable add \$2 per thousand for 12 inches and over.

All prices are based on furnishing rough.

For dressing 3-inch plank and small timbers up to and including 6 by 6, add 50 cents per thousand feet. For S4S add \$1 per thousand.

For dressing 6 by 8 and larger, add \$1 per thousand feet.

For timbers over 14 inches, add \$3 for each 2 inches above 14 inches.

For timbers over 32 feet, add \$1 for each foot.

For tongue and grooved or shiplapping timbers, add \$2 per thousand, 3 inches and over.

For grooving timbers 5 inches thick or thicker for splines, add \$5 per thousand to the above dressed prices.

For grooving timbers, 3 and 4 inches thick, for splines, add \$3 to above dressed prices.

For beveling and outganging, add \$2 per thousand feet.

All prices f. o. b. Norfolk or Richmond (Virginia gates).

War tax not to be paid by shipper.

NOTE.—Prices on all orders destined to points south of Norfolk are to be based on Norfolk list, with freight allowed from shipping point to Norfolk.

(June 28, 1918.)

After considering the information submitted by the Federal Trade Commission as to the cost of manufacturing long and short leaf pine lumber produced in the States of Virginia and North and South Carolina and the information submitted by the representatives of the manufacturers thereof at the hearings held on this date, June 28, 1918, at which their request for readjustment of prices on their products was heard, the price-fixing committee appointed by the President has determined, by agreement with the said representatives of the manufacturers of long and short leaf pine lumber in Virginia and North and South Carolina, upon the following maximum prices for such lumber.

These maximum prices shall not be exceeded on any sales and contracts for sale (for mill shipment) made during the period of three months beginning midnight June 28, 1918, either to the public, to the Government, to Governments of the nations associated with us in the present war, or to the railroads, whether by rail or by water shipment.

Prices of all long and short leaf pine lumber in the States of Virginia and North and South Carolina shall not exceed the item prices named on attached list. These prices are for long and short leaf pine lumber delivered (freight allowed) to Norfolk, Richmond, and other Virginia gateways. For shipments to destination points north of and beyond these gateways these prices are for such portion of freight allowed to destination points as will equal shipments originating in above gateways. For shipments to destination points south of these gateways the f. o. b. cars mill or f. o. b. vessel, rail mill prices shall be \$2.50 per thousand less on each item than prices named on attached list.

Prices on items not covered by above list shall be priced on basis of nearest comparable item.

The usual trade practices shall continue, including cash discounts to be applied to the United States Government purchases as well as all others, except that in commercial transactions where purchasers do not avail themselves of the cash discounts the accounts may be converted into trade acceptances which do not bear interest before maturity.

The custom of delivered prices of lumber to purchasers' destination points shall remain unchanged.

Contracts for the sale of lumber entered into in good faith prior to midnight June 28, 1918, and enforceable at law, will be performed in accordance with their terms, subject, of course, to orders received from the Government which may require priority.

It is imperative that, with the least possible disruption of the industry, the vast war needs of the Government, both direct and indirect, for long and short leaf pine lumber from Virginia and North and South Carolina be supplied on a fair basis, that an adequate supply and equitable distribution thereof be assured for essential commercial needs, that the movement thereof be facilitated, and that injurious speculation therein be prevented. Therefore the procedure outlined below, by agreement with the representatives of the manufacturers of long and short leaf pine lumber from above-mentioned States, has been adopted for a period of three months beginning midnight June 28, 1918.

The procedure is that each manufacturer of long and short leaf pine lumber in Virginia and North and South Carolina shall—

- (1) Make contracts and accept orders for his product at prices not in excess of the applicable maximum prices, always subject to an option at the applicable maximum prices in favor of the United States or the nominee of the War Industries Board. Under this option, which will cover all long and short leaf pine lumber from above-mentioned States down to actual delivery to the purchaser, the War Industries Board, to any extent required, will allocate either to the Government or to other essential users. Any balance not so allocated will be released for sale to commercial buyers, but at prices no greater than those determined upon as above set forth.

- (2) Comply with the directions of the War Industries Board as issued from time to time with reference to filling commercial requirements in the order of their public importance and to furnishing such information and making such reports as may be required.

- (3) Keep up to the best of his ability the production of long and short leaf pine lumber in Virginia and North and South Carolina, so as to insure an adequate supply so long as the war lasts.

- (4) Neither reduce the scale of wages now being paid nor change fundamental labor conditions now in force.

The Government will appportion the car supply available for lumber and arrange for its transportation, subject to allocation by the War Industries Board as aforesaid, to the end that injury to the industry due to abnormal war-time conditions be neutralized so far as may be.

Foreign trade, except to the Government of nations associated with us in the present war, is not to be affected by this ruling.

These prices are for long and short leaf pine lumber delivered (freight allowed) to Norfolk, Richmond, and other Virginia gateways. For shipments to destination points north of and beyond these gateways these prices are for such portion of freight allowed to destination points as will equal shipments originating in above gateways. For shipments to destination points south of these gateways the f. o. b. cars mill or f. o. b. vessel rail mill prices shall be \$2.50 per thousand less on each item than prices named on attached list. Effective June 28 to and including September 28, 1918.

	No. 1.	No. 2.	No. 3.	No. 4.	Cull.
1 by 3 and 3½ flooring.....	\$43.00	\$41.00	\$36.50	\$32.00	.....
1 by 4 and 4½ flooring.....	42.00	40.00	36.50	32.00	.....
1 by 5 and 5½ flooring.....			37.00	33.50	.....
1 by 6 flooring.....			37.50	34.50	.....
1 by 2½ to 5½ flooring.....			36.00	32.00	\$20.00
1½ by 2½ and 3 flooring.....	47.00	45.00	37.50	32.00	.....
1½ by 3½ and 4 flooring.....	47.00	45.00	37.50	32.00	.....
¾ by 2½ inch to 3½-inch ceiling.....	27.50	26.00	24.00	21.00	.....
¾ by 2½ inch to 3½-inch ceiling.....	29.00	27.50	25.50	22.50	.....
¾ by 2½ inch to 3½-inch ceiling.....	31.50	30.00	28.50	24.00	.....
¾ by 2½ inch to 3½-inch ceiling.....	34.00	32.50	30.00	26.00	.....
¾ and 1½ inch, 2½ to 3½ inch ceiling.....	43.00	41.00	.....	.....	.....
¾ by 2½ and 3 partition.....	43.00	41.00	37.00	34.50	.....
¾ by 3½, 4, and 4½ partition.....	44.00	42.00	37.50	.....	.....
¾ by 5 and 5½ partition.....	46.00	44.00	38.00	.....	.....
1 by 6 inch drop or O. G. siding.....	45.00	42.00	37.50	34.50	.....
Bevel siding from 1-inch stock.....	30.00	28.00	26.00	22.00	.....
Bevel siding from 1½-inch stock.....	32.00	30.00	28.00	24.00	.....

Add \$1 per thousand feet for specified lengths.

Deduct \$1 per thousand for air dried (Oct. 1, 1918).

Boards.	1 by 3.	1 by 4.	1 by 6.	1 by 8.	1 by 10.	1 by 12.	1 by 4 to 12 inches.
No. 3 S1 or 2S.....	\$36.00	\$36.00	\$37.00	\$37.00	\$37.00	\$40.00	\$37.00
No. 4 S1 or 2S.....	31.50	31.50	34.00	34.00	35.00	36.50	33.50
Culls and red hearts.....				28.50	28.50	29.00	26.00
Dunnage.....							20.50
No. 1 and 2 bark strips and miscuts, S1 or 2S.....							34.00
No. 3 and 4 bark strips and miscuts, S1 or 2S.....							24.00

For 1-inch Nos. 3 and 4 in specified lengths add 50 cents, except 16-foot, add \$1.

Rough 50 cents less than S2S; S4S, D. and M., or shiplap add 50 cents to S2S prices.

For resawing add \$1 per thousand.

Nos. 1 and 2 bark strips, when worked to partition, add to above S2S price \$2 per thousand feet.

Boards, when ordered kiln dried, add \$1 per thousand feet.

For D. and M. beaded, 8 inches and wider, add \$2 to S2S price (Oct. 1, 1918).

Finish S2S.	No. 1.	No. 2.	No. 3.	No. 4.
1 by 4 to 12, random.....	\$43.50	\$41.50	.....	.....
1 by 4, random.....	43.50	41.50	.....	.....
1 by 6, random.....	44.50	42.50	.....	.....
1 by 8, random.....	45.50	43.50	.....	.....
1 by 10, random.....	46.00	44.00	.....	.....
1 by 12, random.....	47.50	45.50	.....	.....
5/4 by 4 to 12, random.....	47.50	45.50	\$39.00	\$34.50
5/4 by 6, random.....	48.50	46.50	39.00	35.00
5/4 by 8, random.....	49.50	47.50	39.00	35.00
5/4 by 10, random.....	50.00	48.00	39.00	36.00
5/4 by 12, random.....	51.50	49.50	42.00	37.50
6/4 by 4 to 12, random.....	48.50	46.50	41.00	35.00
6/4 by 6, random.....	49.50	47.50	41.00	35.50
6/4 by 8, random.....	50.50	48.50	41.00	35.50
6/4 by 10, random.....	51.00	49.00	41.00	36.50
6/4 by 12, random.....	54.50	52.50	44.00	38.00

Finish S2S.	No. 1.	No. 2.	No. 3.	No. 4.
8/4 by 4 to 12, random.....	\$49.50	\$47.50	\$41.00	.....
8/4 by 6, random.....	50.50	48.50	41.00	.....
8/4 by 8, random.....	51.50	49.50	41.00	.....
8/4 by 10, random.....	52.00	50.00	41.00	.....
8/4 by 12, random.....	53.50	51.50	44.00	.....
Molded casing and base from 1 by 4, 6 and 8 inch stock.....	50.00	47.00	.....	.....
Molded casing and base from 1 by 5 and 10 inch stock.....	52.00	49.00	.....	.....
Jambs from 4/4 stock.....	50.00	47.00	.....	.....
Jambs from 5/4, 6/4, and 8/4 stock.....	53.00	50.00	.....	.....

The above prices are for S2S finish; for S4S, add 50 cents per thousand feet.
For specified lengths, add \$1 per thousand feet; for rough, deduct 50 cents per thousand feet.
Moldings, 1½-inch width and smaller, 52 per cent discount; moldings, 1½ inches and wider, 47 per cent discount.
Laths, No. 1, 4.75; laths, No. 2, \$3.75.

Dimensions.	10, 12, 14, and 16 feet.	18 and 20 feet.	22 and 24 feet.	Random.
2 by 2 S1S1E.....	\$31.00	\$33.00	\$34.50	\$30.50
2 by 3 S1S1E.....	29.50	30.50	32.00	29.00
2 by 4 S1S1E.....	30.00	32.00	33.50	29.50
2 by 6 S1S1E.....	28.50	29.50	31.00	28.00
2 by 8 S1S1E.....	29.50	31.50	33.00	29.00
2 by 10 S1S1E.....	30.00	32.00	33.50	29.50
2 by 12 S1S1E.....	32.00	33.50	35.00	31.50

Dimension when ordered kiln dried, add \$2 per thousand feet.
Dimension D. & M. or shiplap, add \$1 per thousand to S1S1E prices; rough, 50 cents less than S1S1E prices; S4S, add 50 cents per thousand to S1S1E prices.
For dimension over 24 feet, add \$1 for each 2 feet up to 32 feet.
For merchantable longleaf 10 inches and under wide, add \$3 per thousand feet.
For merchantable longleaf 12 inches and over wide, add \$2 per thousand feet. (Oct. 1, 1918.)

NOTE.—All lumber not over 2 inches thick when ordered in odd or fractional lengths will be invoiced as of next longer length in multiples of 2 feet.

Timbers.	10 to 20 feet.	22 and 24 feet.	26 feet.	28 feet.	30 feet.	32 feet.
3 by 4 and 4 by 4.....	\$33.00	\$34.00	\$35.00	\$36.00	\$37.00	\$38.00
3 by 6 to 8 by 8.....	32.00	33.00	34.00	35.00	36.00	37.00
3 by 10 to 4 by 10.....	36.00	37.00	38.00	39.00	40.00	41.00
5 by 10 to 10 by 10.....	35.00	36.00	37.00	38.00	39.00	40.00
3 by 12 to 5 by 12.....	38.00	39.00	40.00	41.00	42.00	43.00
6 by 12 to 12 by 12.....	37.00	38.00	39.00	40.00	41.00	42.00
3 by 14 to 5 by 14.....	43.00	44.00	45.00	46.00	47.00	48.00
6 by 14 to 8 by 14.....	42.50	43.50	44.50	45.50	46.50	47.50
10 by 14 to 14 by 14.....	42.00	43.00	44.00	45.00	46.00	47.00

Add for timbers over 14 inches \$3 for each 2 inches over 14 inches.
Add for timbers over 32 feet \$1 for each foot over 32 feet.
Prices above are for short-leaf dimensions rough; for better qualities and various working apply the following differentials:
For long leaf No. 1 common add \$2 per thousand feet.
For merchantable 10 inches and smaller add \$3 per thousand to No. 1 long-leaf price.
For merchantable 12 inches and larger add \$2 per thousand to No. 1 long-leaf price.
For prime rule of 1905 add \$5 to No. 1 long-leaf price.
Add for dressing \$1 per thousand feet.
Add for T. & G. or shiplap \$2 per thousand feet.
Add for grooving \$3 per thousand to dressed price stock 3 and 4 inches thick.
Add for grooving \$5 per thousand to dressed price stock 5 inches and thicker.
Add for bevelling and outgauging \$2 per thousand feet to dressed prices.
NOTE.—All timber when ordered in odd or fractional lengths will invoice as of next longer length a multiple of 2 feet.

PENNSYLVANIA HEMLOCK.

The original price schedules for Pennsylvania hemlock were announced by the emergency bureau on April 6, 1918, and were approved by the price-fixing committee on May 8, 1918. The base price was \$27 per thousand board feet. This base price was increased on August 15, 1918, to \$29 per thousand, and the price lists rearranged accordingly.
On October 16 revision was postponed and existing prices were continued until December 20, 1918, when all restrictions were removed.

(May 8, 1918, to Aug. 8, 1918.)

The price-fixing committee of the War Industries Board passed the following ruling on May 8, 1918, covering the maximum prices for mill shipment of Pennsylvania hemlock lumber:

"The price of \$31 per thousand feet f. o. b. cars Philadelphia which has been in force since April 6, 1918, shall be continued in effect as the basic maximum price of Pennsylvania hemlock lumber to all departments of the Government until August 8, 1918."

At the same time the following rules with reference to the prices of No. 1 and No. 2 grades of Pennsylvania hemlock were promulgated:

1. That the system of delivered prices be discontinued; and that there be substituted as basic maximum the price of \$27 per thousand feet f. o. b. mill, with variations according to the appended schedule.

2. That the entire stock and production of Pennsylvania hemlock, grades Nos. 1 and 2, will be held available for the direct and indirect needs of the Government in the war, and will be distributed and dealt in subject to the control of the War Industries Board.

3. That such of the lumber as, in the judgment of the chief of the lumber section of said board, can without detriment to governmental requirements be released for urgent commercial or other needs, may be sold to car-lot purchasers (with his consent) at prices which, per item, shall not exceed the prices as established by the appended schedule.

4. This arrangement shall continue effective until August 8, 1918.

SCHEDULE OF VARIATION FROM BASE OF \$27 PER M FEET, BOARD MEASURE, IN CARLOAD LOTS.

NO. 1 STEEL.	
2 by 3:	
10 feet (ripped from 2 by 6), add	\$1. 00
12 and 14 feet, add	1. 00
16 feet, add	3. 00
18 and 20 feet, add	5. 50
2 by 4:	
8 feet, L. R., deduct	2. 00
9 feet, L. R., when in stock, add	2. 00
10 feet	
12 feet	
14 feet	
16 feet, add	3. 00
18 and 20 feet, add	4. 50
22 and 24 feet, add	5. 50
2-inch sizes, No. 2, \$2 per M less than same size in No. 1.	
2 by 6 to 2 by 12:	
10 feet, when in stock, add	
12 and 14 feet	
16 feet, add	1. 50
18 and 20 feet, add	3. 50
22 and 24 feet, add	5. 50
26 and 28 feet, add	6. 50
30 and 32 feet, add	7. 50
34 and 36 feet, add	9. 50
38 and 40 feet, add	11. 50
3 by 4 to 12 by 12: add 50 cents per M feet to price of 2 by 6 to 2 by 12, same lengths.	

NO. 1 BOARDS.	
1 by 6:	
10, 12, and 14 feet	
16 feet, add	\$5. 00
18 and 20 feet, add	4. 00
1 by 8:	
10, 12, and 14 feet	
16 feet, add	2. 00
18 and 20 feet, add	3. 50
1 by 10:	
10, 12, and 14 feet, add	1. 50
16 feet, add	5. 00
18 and 20 feet, add	5. 00
1 by 12:	
12 feet, add	4. 50
10 and 14 feet, add	2. 00
16 feet, add	6. 00
18 and 20 feet, add	6. 00
5/4 and 6/4, add \$2 to price of boards same width.	

NO. 2 BOARDS.	
1 by 6, 8 to 18, rough or S1S, deduct	\$1. 00
1 by 8, 8 to 18, rough or S1S	
1 by 10, 8 to 18, rough or S1S, add	. 50
1 by 12, 8 to 18, rough or S1S, add	. 50

NO. 3 BOARDS.	
1 by 6 to 12:	
8 to 18, rough or S1S, deduct	\$4. 00

LOG RUN BOARDS.	
1 by 4, 8 to 16, rough or S1S, deduct	\$4. 00
1 by 6 to 12, 8, rough or S1S, deduct	3. 00
1 by 6 to 12, 10, S1S, deduct	

DRESSED AND MATCHED BOARDS.	
1 by 4, 8 to 16 feet, No. 1 (25 per cent 10 feet), add	\$1. 00
1 by 6, 10 feet, No. 1	
1 by 6, 8 to 18 feet, No. 2	
1 by 8, 8 to 18 feet, No. 2	
1 by 6, 10 to 16 feet, No. 1 (25 per cent 10 feet), add	3. 00

ROOFING LATH.	
1 by 2, 1 by 2½, and 1 by 3, 10 to 16 feet, add	\$5. 00

SPECIAL SIZES.	
For each inch over 12 inches in width in timber and plank add 50 cents per M.; 5 inches, 7 inches, 9 inches, and 11 inches sawed to order, \$1 per M. extra.	

PRICES FOR WORKING LUMBER.	
Saw sized or S1S1E...per M	\$1. 75
Dressing 1 or 2 sides (except L. R. No. 2 and 3 boards)....per M	1. 50
Ship lap or matching (except as specified under D and M. boards)....per M	2. 00
Joists worked to flooring, or grooved 2 edges, or dressed 4 sides...per M	2. 00

(Aug. 15, 1918.)

The price-fixing committee of the War Industries Board announces a base price of \$29, an increase of \$2 over the former price of Pennsylvania hemlock lumber. The entire output of No. 1 and No. 2 grades will probably be required by the Government, and the stock will be distributed subject to the control of the War Industries Board. Following is the official announcement:

"After considering the information submitted by the Federal Trade Commission as to the cost of hemlock-lumber production in the State of Pennsylvania, and the information submitted by the representatives of the manufacturers of such lumber at a hearing granted them on Wednesday, August 14, 1918, the price-fixing committee of the War Industries Board, by agreement with the producers, passed a ruling fixing a maximum base price for mill shipments of Pennsylvania hemlock lumber at \$29 per thousand feet, f. o. b. cars shipping point, such price to become effective midnight August 15, 1918, and to remain in effect to and including October 20, 1918.

"The following companies, producing the greater part of Pennsylvania hemlock lumber, were present at the hearing: Goodyear Lumber Co., Norwich, Pa.; Wheeler & Dusenbury, Endeavor, Pa.; Pennsylvania Lumber Co., Killeetsville, Pa.; Central Pennsylvania Lumber Co., Williamsport, Pa.

"By reason of the construction program of the various governmental departments, it is apparent that the Government will require substantially the entire output of No. 1 and No. 2 grades of Pennsylvania hemlock. It was, therefore, agreed at the hearing by all of the above manufacturers:

"(1) That their entire stock and production of Pennsylvania hemlock, grades Nos. 1 and 2, will be held available for the direct and indirect needs of the Government in the war, and will be distributed and dealt in subject to the control of the War Industries Board.

"(2) That such of the foregoing lumber as, in the judgment of the chief of the lumber section of said board, can, without detriment to governmental requirements, be released for urgent commercial or other needs may be sold to car-lot purchasers (with his consent) at prices which, per item, shall not exceed the prices as established by the attached list."

The "attached" list referred to above contains the item prices, which are unchanged from the old list, except that they apply to the new \$29 base.

NO. 1 SIZES.		NO. 1 BOARDS.	
2 by 3:		1 by 6:	
10 feet (ripped from 2 by 6)---	\$30.00	10, 12, and 14 feet-----	\$29.00
12 and 14 feet-----	30.00	16 feet-----	34.00
16 feet-----	32.00	18 and 20 feet-----	33.00
18 and 20 feet-----	34.50	1 by 8:	
2 by 4:		10, 12, and 14 feet-----	29.00
8 feet, L. R.-----	27.00	16 feet-----	31.00
9 feet, L. R. (when in stock)-	31.00	18 and 20 feet-----	32.50
10 feet-----	29.00	1 by 10:	
12 feet-----	29.00	10, 12, and 14 feet-----	30.50
14 feet-----	29.00	16 feet-----	34.00
16 feet-----	32.00	18 and 20 feet-----	34.00
18 and 20 feet-----	33.50	1 by 12:	
22 and 24 feet-----	34.50	12 feet-----	33.50
2 by 6 to 12 by 12:		10 and 14 feet-----	31.00
10 feet (when in stock)-----	29.00	16 feet-----	35.00
12 and 14 feet-----	29.00	18 and 20 feet-----	35.00
16 feet-----	30.50	5/4 and 6/4, add \$2 to price of boards	
18 and 20 feet-----	32.50	same width.	
22 and 24 feet-----	34.50	NO. 2 BOARDS.	
26 and 28 feet-----	35.50	1 by 6, 8 to 18, rough or S1S-----	\$28.00
30 and 32 feet-----	36.50	1 by 8, 8 to 18, rough or S1S-----	29.00
34 and 36 feet-----	38.50	1 by 10, 8 to 18, rough or S1S-----	29.50
38 and 40 feet-----	40.50	1 by 12, 8 to 18, rough or S1S-----	29.50
3 by 4 to 12 by 12, add 50 cents per		NO. 3 BOARDS.	
M feet to price of 2 by 6 to 2 by 12, same		1 by 6 to 12, 8 to 18 feet, rough or	
lengths.		S1S-----	\$25.00
2-inch sizes, No. 2, \$2 per M feet less			
than same size in No. 1.			

LOG RUN BOARDS.	
1 by 4, 8 to 16, rough or S1S-----	\$25.00
1 by 6 to 12, 8, rough or S1S-----	26.00
1 by 6 to 12, 10, rough or S1S-----	29.00

DRESSED AND MATCHED BOARDS.	
1 by 4, 8 to 16 feet (25 per cent, 10 feet), No. 1-----	\$30.00
1 by 6, 10 feet, No. 1-----	29.00
1 by 6, 10 to 16 feet (25 per cent, 10 feet), No. 1-----	32.00
1 by 6, 8 to 18 feet, No. 2-----	29.00
1 by 8, 8 to 18 feet, No. 2-----	29.00

ROOFING LATH.	
1 by 2, 1 by 2½, and 1 by 3, 10 to 16 feet-----	\$34.00

PRICES FOR WORKING LUMBER.	
(Per M feet.)	
Saw sizes or S1S1E-----	\$1.75
Dressing 1 or 2 sides (except L. R. and Nos. 2 and 3 boards)-----	1.50
Ship-lap or matching (except as specified under D. and M. boards)-----	2.00
Joists worked to flooring, or grooved 2 edges, or dressed 4 sides-----	2.00

SPECIAL SIZES.

For each inch over 12 inches in width in timber and plank add 50 cents per M; 5 inches, 7 inches, 9 inches, and 11 inches, sawed to order, \$1 per M extra.

SOUTHERN OR YELLOW PINE.

Informal arrangements.—The lumber committee of the Council of National Defense made an informal agreement with the Southern Pine Association on June 13, 1917. This agreement covered items of lumber necessary for the building of cantonments. The average price for the grades required was \$20 per thousand board feet.

On September 11, 1917, a voluntary reduction of \$1 per thousand was made on 1-inch boards and 50 cents per thousand on 2-inch dimensions. Another reduction of approximately 50 cents per thousand became effective October 10, 1917.

A third reduction in November made a total average reduction of \$1.65 per thousand board feet.

On November 21, 1917, the War Industries Board, upon the recommendation of the lumber committee,¹ approved lumber prices for a period up to December 10, 1917. The price then in effect was equivalent to \$23.20 per thousand feet mill run. These prices were published on January 28, 1918, by the southern emergency bureau and by the Alabama and Mississippi emergency bureau.

No action was then taken by any Government agency until March 21, 1918, when the price-fixing committee decided not to grant an advance in price. During the period of agreement the prices were fixed to the Government only.

In June, 1918, the industry asked for another advance in prices with permission to apply the fixed price to Government purchases only. Mr. Baruch on this occasion stated that "the President was emphatic upon the point that the prices fixed should apply both to the Government and to the public, even if the Government had to suffer thereby."²

The price-fixing committee then fixed the price of yellow pine, effective June 15, 1918, at \$28 per thousand board feet to both civilian and Government purchasers. The new schedules on this basis represented an advance of approximately \$4.80 per thousand over the former price lists.

Except for minor modifications, these schedules were reviewed again in September, 1918, and remained in force until December 23, 1918, when control ceased. At that time the following notice was sent by the lumber division of the War Industries Board to the southern lumber administrator:

Regarding status of unshipped orders entered since June 14, 1918, at the expiration of the present leases, December 23, 1918, Government orders will be subject to rate negotiation as to prices. Commercial orders entered during the above period at agreed-upon item prices will not be affected.³

¹ Minutes of the War Industries Board, Nov. 21, 1917.

² Minute Book V of the price-fixing committee, meeting of June 13, 1918.

³ Federal Trade Information Service, Dec. 23, 1918.

(Nov. 11, 1917, to June 15, 1918.)

Government yellow pine or southern pine maximum prices covering States of Missouri, Arkansas, Texas, Oklahoma, Louisiana, Mississippi, Tennessee, and Alabama, and that part of Florida lying west of the east line of Alabama if continued to the Gulf:

	B and better rift.	B and better.	No. 1 common.	No. 2 common.
1 by 3 flooring.....	\$44.00	\$32.00	\$29.00	\$19.00
1 by 4 flooring.....	42.00	30.00	27.00	19.00
1 by 6 flooring.....		32.50	27.50	20.00
1 by 3 to 6 inches flooring.....				19.50
1 by 4 and 6 inches flooring.....				19.50
1 by 4 ceiling.....		28.00	25.00	18.00
1 by 4 ceiling.....		21.00	27.50	19.00
1 by 6 drop siding.....		31.00	27.00	21.00

	B and better.	"C."	No. 1 common.
1 by 4, random lengths.....	\$31.50	\$28.00	
1 by 6 and 8 inches, random lengths.....	33.00	30.00	
1 by 10, random lengths.....	34.00	31.50	
1 by 12, random lengths.....	35.00	32.00	
1 by 4 to 12, random lengths.....	33.00	30.00	
1 by 4 to 8 inches, random lengths.....	38.00		\$21.00
1 by 10 and 12 inches, random lengths.....	40.00		23.00
1 by 4 to 8 inches, random lengths.....	38.00		31.00
1 by 10 and 12 inches, random lengths.....	40.00		33.00
2 by 4 to 8 inches, random lengths.....	38.00		
2 by 10 and 12 inches, random lengths.....	40.00		

The above prices are for S2S finish; for S4S add 50 cents per thousand feet; for specified lengths add \$1 per thousand feet; for rough deduct 50 cents per thousand feet.

Boards.	1 by 2.	1 by 3.	1 by 4.	1 by 6.	1 by 8.	1 by 10.	1 by 12.	1 by 4 to 12.
No. 1 S1 or 2S.....	\$24.00	\$25.00	\$23.00	\$24.00	\$24.00	\$24.00	\$27.00	
No. 2 S1 or 2S.....	19.00	20.00	18.00	19.00	20.00	20.00	22.00	\$20.00
No. 3 S1 or 2S.....			15.00	15.50	16.00	16.00	16.50	15.50

For 1 inch No. 1 and No. 2 in specified lengths add 50 cents, except 16 feet and \$1; rough 50 cents less than S2S; S4S, D. & M. or shiplap add 50 cents to S2S prices. For resawing add \$1 per thousand feet.

Dimension.	10, 18, and 20 feet.	12, 14, and 16 feet.	22 and 24 feet.	Random.
2 by 2 No. 1 common, S1S1E.....	\$22.50	\$20.50	\$24.00	\$20.50
2 by 3 No. 1 common, S1S1E.....	20.00	19.00	21.50	19.00
2 by 4 No. 1 common, S1S1E.....	21.50	19.50	23.00	19.50
2 by 6 No. 1 common, S1S1E.....	19.00	18.00	20.50	18.00
2 by 8 No. 1 common, S1S1E.....	21.00	19.00	22.50	19.00
2 by 10 No. 1 common, S1S1E.....	21.50	19.50	23.00	19.50
2 by 12 No. 1 common, S1S1E.....	23.00	21.50	24.50	21.50
2 by 2 No. 2 common, S1S1E.....	21.00	19.00	22.50	19.00
2 by 3 No. 2 common, S1S1E.....	18.50	17.50	20.00	17.50
2 by 4 No. 2 common, S1S1E.....	20.00	18.00	21.50	18.00
2 by 6 No. 2 common, S1S1E.....	17.50	16.50	19.00	16.50
2 by 8 No. 2 common, S1S1E.....	19.50	17.50	21.00	17.50
2 by 10 No. 2 common, S1S1E.....	20.00	18.00	21.50	18.00
2 by 12 No. 2 common, S1S1E.....	21.50	20.00	23.00	20.00

No. 3 common, S1S1E, 8 to 20 feet: 2 by 4 and 8 inches, \$13; 2 by 6, \$12.50; 2 by 10, \$13.50; 2 by 12, \$14.

For D. & M. or shiplap add \$1 per thousand to S1S1E prices; rough 50 cents less than S1S1E prices; for S4S dimension add 50 cents per thousand to S1S1E prices; for No. 1 dimension over 24 feet add \$1 for each 2 feet up to 32 feet.

	10 to 20 20 feet.	22 and 24 feet.	26 feet.	28 feet.	30 feet.	32 feet.
3 by 4 and 4 by 4.....	\$20.00	\$21.00	\$22.00	\$23.00	\$24.00	\$25.00
3 by 6 to 8 by 8.....	19.00	20.00	21.00	22.00	23.00	24.00
3 by 10 to 4 by 10.....	23.00	24.00	25.00	26.00	27.00	28.00
5 by 10 to 10 by 10.....	22.00	23.00	24.00	25.00	26.00	27.00
The above prices on short and on long leaf rough No. 1.						
3 by 12 to 5 by 12.....	25.00	26.00	27.00	28.00	29.00	30.00
6 by 12 to 12 by 12.....	24.00	25.00	26.00	27.00	28.00	29.00
2 by 14 to 5 by 14.....	30.00	31.00	32.00	33.00	34.00	35.00
6 by 14 to 8 by 14.....	29.50	30.50	31.50	32.50	33.50	34.50
10 by 14 to 14 by 14.....	29.00	30.00	31.00	32.00	33.00	34.00

The above prices are for short-leaf No. 1 common; for long-leaf timbers No. 1 common 12-inch and 14-inch face add \$2 per thousand to prices shown above.

For merchantable add \$3 per thousand for 10 inches and under.

For merchantable add \$2 per thousand for 12 inches and over.

All prices on the above are based on furnishing rough.

For dressing 8-inch plank 4 inches and wider and small timbers up to and including 6 by 6 add 50 cents per thousand.

For dressing 6 by 8 and larger add \$1 per thousand.

For timbers over 14 inches, add \$3 for each 2 inches above 14 inches; for timbers over 32 feet, add \$1 for each foot; for tongue and grooved or shiplapping timbers, add \$2 per thousand for 3 inches and over; for grooving timbers 5 inches thick or thicker for splines, add \$5 per thousand to above dressed prices; for grooving timbers 3 and 4 inches thick for splines, add \$3 to above dressed prices; for beveling and outgaging, add \$2 per thousand feet.

EXPORT PRICES.

[Grading as per Gulf coast specifications of 1910.]

PRIME.

1-inch random widths and lengths.....	\$43.00
1½-inch random widths and lengths.....	48.00
1½-inch random widths and lengths.....	48.00
2-inch random widths and lengths.....	48.00

GENOA OR RIO PRIME DEALS.

3 to 5 inches thick, 4 to 8 inches wide, 16 feet and up to average 24 feet.....	27.00
3 to 5 inches thick, 9 and 10 inches wide, 16 feet and up to average 24 feet.....	31.00
3 to 5 inches thick, 11 and 12 inches wide, 16 feet and up to average 24 feet.....	35.00

MERCHANTABLE SAWN TIMBERS.

Regular cubic average:

30 cubic.....	\$31.00
32½ cubic.....	32.50
35 cubic.....	34.00
37½ cubic.....	35.00
40 cubic.....	37.50

M. C. B. CAR SIDING PATTERN.

1 by 4 and 6 inches, B. and better:

5 feet.....	\$30.00
8 or 16 feet.....	32.00
9 or 18 feet.....	26.00
10 or 20 feet.....	35.00

M. C. B. CAR LINING AND ROOFING PATTERN.

1 by 4 and 6 inches, B. and better, 5 feet or multiples.....	\$33.00
1 by 4, random lengths, No. 1.....	27.00
1 by 6, random lengths, No. 1.....	27.50

STANDARD CAR DECKING.

2 by 6 and 8 inches, 9, 10, 18, and 20 feet, dressed to 1½.....	\$25.00
2½ by 6 and 8 inches, 9, 10, 18, and 20 feet, dressed to 2½.....	26.00

NO. 1 COMMON DIMENSION WORKED TO CAR DECKING.

2 by 6, 9, 10, 18, and 20 feet, dressed to 1½.....	\$21.00
2 by 8, 9, 10, 18, and 20 feet, dressed to 1½.....	23.00

For heart-face decking, add \$3 per thousand.

CAR FRAMING.

Long leaf merchantable grade S4S to ¾-inch scant and cut to length—

Up to 8 inches, 20 feet and under.....	\$26.00
10 inches, 20 feet and under.....	28.00
12 inches, 20 feet and under.....	33.00
14 inches, 20 feet and under.....	36.00

CAR SILLS.

For price on car sills, use timber list; for price of construction timbers and caps, use timber list; for 85 to 90 per cent cubical contents heart, add \$4 per thousand feet, No. 1 common long-leaf price; for standard heart with special sap location, add \$5 per thousand feet to No. 1 common long-leaf price; for prices for States of Georgia and that part of Florida lying east of Alabama east line if continued to the Gulf, add \$1 per thousand to all prices shown above.

(June 14, 1918.)

After considering the information submitted by the Federal Trade Commission as to the cost of manufacturing southern or yellow pine lumber and the information submitted by the representatives of the manufacturers thereof at the hearings held on the 12th, 13th, and 14th of June, 1918, at which their request for a readjustment of prices on their products was heard, the price-fixing committee appointed by the President has determined, by agreement with the said representatives of the manufacturers of southern or yellow pine lumber, upon the following maximum prices for such lumber. These maximum prices shall not be exceeded on any sales and contracts for sale (for mill shipment) made during a period of three months beginning midnight June 14, 1918, either to the public, to the Government, to governments of the nations associated with us in the present war, or the railroads, whether by rail or by water shipment.

The prices of all southern or yellow pine lumber in the States of Missouri, Arkansas, Oklahoma, Texas, Louisiana, Mississippi, Tennessee, Alabama, Georgia, and Florida shall not exceed the item prices named in attached list, except that in the first three States named above an additional price of \$3 per thousand will be allowed on all items of short leaf soft pine C and better finish, casing, base, and jambs.

Prices on items not covered by above list shall be priced on basis of nearest comparable item.

The usual trade practices shall continue, including cash discounts to be applied to the United States Government purchases as well as all others, except that in commercial transactions where purchasers do not avail themselves of the cash discounts the accounts may be converted into trade acceptances which do not bear interest before maturity.

The custom of delivered prices of lumber to purchasers' destination points shall remain unchanged, including the equalization of freight rates.

Contracts for the sale of lumber entered into in good faith prior to midnight June 14, 1918, and enforceable at law, will be performed in accordance with their terms, subject, of course, to orders received from the Government which may require priority.

It is imperative that, with the least possible disruption of the industry, the vast war needs of the Government, both direct and indirect, for southern or yellow pine lumber be supplied on a fair basis; that an adequate supply and equitable distribution thereof be assured for essential commercial needs; that the movement thereof be facilitated, and that injurious speculation therein be prevented. Therefore the procedure outlined below, by agreement with the representatives of the manufacturers of southern or yellow pine lumber, has been adopted for a period of three months beginning midnight June 14, 1918.

The procedure is that each manufacturer of southern or yellow pine lumber shall—

(1) Make contracts and accept orders for his product at prices not in excess of the applicable maximum prices, always subject to an option at the applicable maximum prices in favor of the United States or the nominee of the War Industries Board. Under this option, which will cover all southern or yellow pine lumber down to time of actual delivery to the purchaser, the War Industries Board, to any extent required, will allocate either to the Govern-

ment or to other essential users. Any balance not so allocated will be released for sale to commercial buyers, but at prices no greater than those determined upon as above set forth.

(2) Comply with the directions of the War Industries Board as issued from time to time with reference to filling commercial requirements in the order of their public importance and to furnishing such information and making such reports as may be required.

(3) Keep up to the best of his ability the production of southern or yellow pine lumber, so as to insure an adequate supply so long as the war lasts.

(4) Neither reduce the scale of wages now being paid nor change fundamental labor conditions now in force.

The Government will apportion the car supply available for lumber and arrange for its transportation, subject to allocation by the War Industries Board as aforesaid, to the end that injury to the industry due to abnormal war-time conditions be neutralized so far as may be.

Foreign trade, except to the governments of nations associated with us in the present war, is not to be affected by this ruling.

GOVERNMENT MAXIMUM PRICE LIST.

Government yellow pine or southern pine maximum prices, effective midnight June 14 to and including September 14, 1918, covering States of Missouri, Arkansas, Texas, Oklahoma, Louisiana, Mississippi, Tennessee, Georgia, Florida, and Alabama:

	B and better heart rift.	B and better rift.	B and better.	No. 1 common.	No. 2 common.
1 by 3 flooring.....	\$54.00	\$48.00	\$36.00	¹ \$34.00	\$24.50
1½ by 3 flooring.....	66.00	60.00	48.00	.....	.....
1 by 4 flooring.....	52.00	46.00	34.00	¹ 32.00	24.50
1½ by 4 flooring.....	63.00	57.00	45.00	.....	.....
1 by 6 flooring.....	.....	.....	36.50	¹ 33.00	25.50
1 by 3 to 6 inch flooring.....	.....	.....	.....	.....	25.00
1 by 4 and 6 inch flooring.....	.....	.....	.....	.....	25.00
1 by 4 ceiling.....	.....	.....	30.50	29.00	22.50
1½ by 4 ceiling.....	.....	.....	32.00	30.50	23.50
1½ by 4 ceiling.....	.....	.....	35.00	33.00	24.50
1 by 4 partition.....	.....	.....	37.00	34.00	.....
1 by 6 partition.....	.....	.....	39.50	36.50	.....
1 by 6 drop siding.....	.....	.....	35.00	32.50	26.50
Bevel siding from 1-inch stock.....	.....	.....	25.00	23.00	19.00
Bevel siding from 1½-inch stock.....	.....	.....	27.50	25.50	21.50

¹ Denotes grade as per rule on flooring. Add \$1 per thousand feet for specified lengths.

Finish S2S.	B and better.	C.	No. 1 common.
1 by 4 random.....	\$35.50	\$32.00	.....
1 by 6 and 8 inch, random.....	37.00	34.00	.....
1 by 10 random.....	38.00	35.50	.....
1 by 12 random.....	39.00	36.00	.....
1 by 4 to 12 inch random.....	37.00	34.00	.....
1½ by 4 to 8-inch random.....	42.00	.....	36.50
1½ by 10 and 12 inch random.....	44.00	.....	38.50
1½ by 4 to 8 inch random.....	42.00	.....	36.50
1½ by 10 and 12 inch random.....	44.00	.....	38.50
2 by 4 to 8 inch random.....	42.00	.....	.....
2 by 10 and 12 inch random.....	44.00	.....	.....
Molded casing and base from 1 by 4, 6 and 8 inch stock.....	43.00	.....	.....
Molded casing and base from 1 by 5 and 10 inch stock.....	45.00	.....	.....
Jambs from 4/4 stock.....	43.00	.....	.....
Jambs from 5/4 and 6/4 stock and 8/4.....	48.00	.....	.....

The above prices are for S2S finish; for S4S add 50 cents per thousand feet; for specified lengths, add \$1 per thousand feet; for rough, deduct 50 cents per thousand feet.

NOTE.—C and better shortleaf finish, base, casing, and jambs manufactured in the States of Missouri, Oklahoma, and Arkansas may be sold at \$3 per thousand higher than above prices.

Moldings: 1½ inch width and smaller, 55 per cent discount; 1½ inches and wider—50 per cent discount.

Boards.	1 by 2.	1 by 3.	1 by 4.	1 by 6.	1 by 8.	1 by 10.	1 by 12.	1 by 4 to 12
No. 1, S1 or 2S.....	\$29.50	\$30.50	\$28.50	\$29.50	\$29.50	\$29.50	\$32.50	.....
No. 2, S1 or 2S.....	24.50	25.50	23.50	24.50	25.50	25.50	27.50	\$25.50
No. 3, S1 or 2S.....			20.50	21.00	21.50	21.50	22.00	21.00
No. 4, S1 or 2S.....								15.00

For 1 inch No. 1 and No. 2 in specified lengths, add 50 cents, except 16 feet add \$1; rough, 50 cents less than S2S; S4S, D. and M. or shiplap, add 50 cents to S2S prices. or resawing, add \$1 per thousand.
Boards when ordered kiln dried, add \$1 per thousand feet.

Dimensions.	10, 18, and 20 feet.	12, 14, and 16 feet.	22 and 24 feet.	Random.
2 by 2, No. 1 common, S1S1E.....	\$26.50	\$24.50	\$28.00	\$24.50
2 by 3, No. 1 common, S1S1E.....	24.00	23.00	25.50	23.00
2 by 4, No. 1 common, S1S1E.....	25.50	23.50	27.00	23.50
2 by 6, No. 1 common, S1S1E.....	23.00	22.00	24.50	22.00
2 by 8, No. 1 common, S1S1E.....	25.00	23.00	26.50	23.00
2 by 10, No. 1 common, S1S1E.....	25.50	23.50	27.00	23.50
2 by 12, No. 1 common, S1S1E.....	27.00	25.50	28.50	25.50
2 by 2, No. 2 common, S1S1E.....	25.00	23.00	26.50	23.00
2 by 3, No. 2 common, S1S1E.....	22.50	21.50	24.00	21.50
2 by 4, No. 2 common, S1S1E.....	24.00	22.00	25.50	22.00
2 by 6, No. 2 common, S1S1E.....	21.50	20.50	23.00	20.50
2 by 8, No. 2 common, S1S1E.....	23.50	21.50	25.00	21.50
2 by 10, No. 2 common, S1S1E.....	24.00	22.00	25.50	22.00
2 by 12, No. 2 common, S1S1E.....	25.50	24.00	27.00	24.00
2 by 4 by 2 by 8, No. 3 common, S1S1E (8 to 20 feet).....				17.00
2 by 6, No. 3 common, S1S1E (8 to 20 feet).....				16.50
2 by 10, No. 3 common, S1S1E (8 to 20 feet).....				17.50
2 by 12, No. 3 common, S1S1E (8 to 20 feet).....				18.00

Dimension when ordered sized 3/4-inch scant in thickness and/or/width, add \$2 per thousand feet.
Dimension when ordered kiln-dried, add \$2 per thousand feet.
Dimension D. and M. or shiplap, add \$1 per thousand to S1S1E prices; rough, 50 cents less than S1S1E prices; S4S, add 50 cents per thousand to S1S1E prices.
For No. 1 common, dimension over 24 feet, add \$1 for each 2 feet up to 32 feet.
NOTE.—All lumber not over 2 inches thick, when ordered odd or fractional lengths, will invoice as of next longer length in multiple of 2 feet.

Timbers.	10 to 20 feet.	22 and 24 feet.	26 feet.	28 feet.	30 feet.	32 feet.
3 by 4 and 4 by 4.....	\$25.00	\$26.00	\$27.00	\$28.00	\$29.00	\$30.00
3 by 6 to 8 by 8.....	24.00	25.00	26.00	27.00	28.00	29.00
3 by 10 to 4 by 10.....	28.00	29.00	30.00	31.00	32.00	33.00
5 by 10 to 10 by 10.....	27.00	28.00	29.00	30.00	31.00	32.00
3 by 12 to 5 by 12.....	30.00	31.00	32.00	33.00	34.00	35.00
6 by 12 to 12 by 12.....	29.00	30.00	31.00	32.00	33.00	34.00
3 by 14 to 5 by 14.....	35.00	36.00	37.00	38.00	39.00	40.00
6 by 14 to 8 by 14.....	34.50	35.50	36.50	37.50	38.50	39.50
10 by 14 to 14 by 14.....	34.00	35.00	36.00	37.00	38.00	39.00

Add for plank 2 inches thick, cut full size, \$1 per thousand to list of 8 inches of same width or over.
Add for timbers 14 inches \$3 for each 2 inches over 14 inches.
All for timbers over 32 feet \$1 for each foot over 32 feet.
Prices above are for short-leaf No. 1 common rough; for better qualities and various working apply the following differentials:
For long leaf No. 1 common add \$2 per thousand feet.
For merchantable 10 inches and smaller add \$3 per thousand to No. 1 long-leaf price.
For merchantable 12 inches and larger add \$2 per thousand to No. 1 long-leaf price.
For prime rule of 1905 add \$5 to No. 1 long-leaf price.
For 85 to 90 per cent cubical contents heart, 12 inches and under, add to No. 1 common long leaf \$3 per thousand.
For 85 to 90 per cent cubical contents heart, 14 inches and under, add to No. 1 common long leaf \$3.50 per thousand.
For 85 to 90 per cent cubical contents heart, 16 inches and under, add to No. 1 common long leaf \$4.50 per thousand.
For 85 to 90 per cent facial area heart, 12 inches and under, add to No. 1 common long leaf \$5 per thousand.

For 85 to 90 per cent facial area heart, 14 inches and under, add to No. 1 common long leaf \$5.50 per thousand.

For 85 to 90 per cent facial area heart, 16 inches and under, add to No. 1 common long leaf \$6.50 per thousand.

For all heart timbers 12 inches and under add to No. 1 common long leaf \$7 per thousand.

For all heart timbers 14 inches and under add to No. 1 common long leaf \$8 per thousand.

For all heart timbers 16 inches and under add to No. 1 common long leaf \$10 per thousand.

For standard heart timbers 12 inches and under add to No. 1 common long leaf \$4 per thousand.

For standard heart timbers 14 inches and under add to No. 1 common long leaf \$5.50 per thousand.

For standard heart timbers 16 inches and under add to No. 1 common long leaf \$6.50.

For heart face, one face only, 12 inches and under, add to No. 1 common long leaf \$4.50 per thousand.

For heart face, one face only, 14 inches and under, add to No. 1 common long leaf \$5 per thousand.

For heart face, one face only, 16 inches and under, add to No. 1 common long leaf \$6 per thousand.

Add for dressing \$1 per thousand feet.

Add for tongue and groove or shiplap \$2 per thousand feet.

Add for grooving \$3 per thousand to dressed price stock 3 inches and 4 inches thick.

Add for grooving \$5 per thousand to dressed price stock 5 inches and thicker.

Add for beveling and outgauging \$2 per thousand feet to dressed prices.

NOTE.—All timber when ordered in odd or fractional lengths, will invoice as of next longer length a multiple of 2 feet.

Add \$1 to list when ordered cut on fractional sizes. Prices on fractional sizes will be determined as follows: Sizes containing fractions under one-half inch shall take price of next smaller size listed. Sizes containing fractions half inch or greater shall take price of next larger size listed. For examples:

5½ by 8½ inches will take price of 6 by 8 plus \$1.

5½ by 8½ inches will take price of 6 by 10 plus \$1.

Ship decking, United States Navy specifications No. 39 P. I. B.:

4½ by 4½ and smaller when not more than 1 inch off square	\$100.00
3½ by 5½ and smaller when difference between thickness and width is over 1 inch	116.00

EXPORT PRICES.

[Grading as per Gulf coast specifications of 1910.]

PRIME.

1-inch random widths and lengths	\$47.00
1½-inch random widths and lengths	52.00
1¾-inch random widths and lengths	52.00
2-inch random widths and lengths	52.00

GENOA OR RIO PRIME DEALS.

3 to 5 inches thick, 4 to 8 inches wide, 16 feet and up, to average 24 feet	\$32.00
3 to 5 inches thick, 9 to 10 inches wide, 16 feet and up, to average 24 feet	36.00
3 to 5 inches thick, 11 and 12 inches wide, 16 feet and up, to average 24 feet	40.00

MERCHANTABLE SAWN TIMBERS.

Regular cubic average:

30 cubic	\$33.50
32½ cubic	35.00
35 cubic	36.50
37½ cubic	38.00
40 cubic	40.00

NOTE.—The southern yellow pine maximum Government price list for the period from midnight September 23 to and including December 23, 1918, was the same as the preceding price list except in the following particulars:

Under No. 2 common: 1 by 3 flooring is changed to \$26; 1 by 4 flooring, \$25; 1 by 6 flooring, \$26; ¾ by 4 partition, \$26; and ¾ by 6 partition, \$27. For air-dried flooring \$1 per thousand feet is deducted.

The following prices for No. 2 common are added: 1½ by 4 to 8 inches, random, \$31; 1½ by 10 and 12 inches, random, \$33; 1½ by 4 to 8 inches, random, \$31; 1½ by 10 and 12 inches, random, \$33.

Under "Boards" a price for No. 2, S1 or 2S, is omitted.

Under "Dimension" the price for 2 by 2, No. 2 common, S1S1E is increased to \$26. For merchantable long leaf 10 inches and under wide \$3 per thousand feet is added, and \$2 per thousand feet is added for merchantable long leaf 12 inches and over wide.

The note under "Timbers" in the preceding list reading "Add for plank 2 inches thick, cut full size, \$1 per thousand, to list at 3 inches of same width or over," is omitted from this later list.

A price is added of \$3.65 for No. 1 standard yellow pine lath, and \$2.65 for No. 2 standard yellow pine lath.

RAILROAD AND CAR MATERIAL.

Government yellow pine or southern yellow pine maximum prices are effective mid-
night June 14 to and including September 14, 1918, covering States of Missouri, Arkansas,
Texas, Oklahoma, Louisiana, Mississippi, Tennessee, Georgia, Florida, and Alabama :

FLOORING, CEILING, AND DROP SIDING, WORKED STANDARD PATTERNS.

Length 8 to 20 feet.¹

	B and better, heart rift.	B and better, rift.	B and better.	No. 1.	No. 2
1 by 3 flooring.....	\$54.00	\$48.00	\$36.00	\$34.00	\$24.50
1½ by 4 flooring.....	66.00	60.00	48.00	.....	.....
1 by 4 flooring.....	52.00	46.00	34.00	32.00	24.50
1½ by 4 flooring.....	63.00	57.00	45.00	.....	.....
1 by 6 flooring.....	.....	.....	36.50	33.00	25.50
1 by 3 to 6 inch flooring.....	.....	.....	.....	.....	25.00
1 by 4 to 6 inch flooring.....	.....	.....	.....	.....	25.00
¾ by 4 ceiling.....	.....	.....	32.00	30.50	23.50
¾ by 4 ceiling.....	.....	.....	35.00	33.00	24.50
¾ by 4 ceiling.....	.....	.....	40.00	37.00	27.50
¾ by 4 ceiling.....	.....	.....	47.00	43.00	30.50
¾ by 4 partition.....	.....	.....	37.00	34.00	.....
¾ by 6 partition.....	.....	.....	39.50	36.50	.....
1 by 6 drop siding.....	.....	.....	35.00	32.50	26.50

¹ Add \$1 per thousand feet for specified lengths.

ROUGH BOARDS AND FINISH RANDOM LENGTHS.¹

	B and better. ¹	"C." ²	No. 1 common. ⁴	No. 2 common. ⁴	No. 3 common.	No. 4 common.
1 by 2.....	\$36.00	\$32.50	\$39.00	\$24.00	.....	.....
1 by 3.....	37.50	34.50	30.00	25.00	.....	.....
1 by 4.....	35.00	31.50	28.00	23.00	\$20.50	\$14.50
1 by 6.....	36.50	33.50	29.00	24.00	20.50	14.50
1 by 8.....	36.50	33.50	29.00	25.00	21.00	14.50
1 by 10.....	37.50	35.00	29.00	25.00	21.00	14.50
1 by 12.....	38.50	35.50	32.00	27.00	21.50	14.50
1½ by 4 to 8 inches.....	41.50	.....	36.00	.....	.....	.....
1½ by 10 and 12 inches.....	43.50	.....	38.00	.....	.....	.....
1½ by 4 to 8 inches.....	41.50	.....	36.00	.....	.....	.....
1½ by 10 and 12 inches.....	43.50	.....	38.00	.....	.....	.....
1½ by 4 to 8 inches.....	41.50	(5)	(6)	(6)	(6)	(6)
1½ by 10 and 12 inches.....	43.50	(5)	(6)	(6)	(6)	(6)
2 by 4 to 8 inches.....	41.50	(5)	(6)	(6)	(6)	(6)
2 by 10 and 12 inches.....	43.50	(5)	(6)	(6)	(6)	(6)

¹ In all grades for widths exceeding 12 inches, including 16 inches, add \$3 for each 2 inches or fraction thereof.

² In grades B and better and "C" for specified lengths up to 20 feet add \$1.

³ In grades B and better, "C," Nos. 1 and 2 common for 22 and 24 feet add \$2.

⁴ In grades No. 1 and No. 2 common for specified lengths up to 20 feet, except 16 feet, add 50 cents a thousand; for 16 feet add \$1.

⁵ For 1-inch common stock ordered kiln dried add \$1.

ROUGH PLANK AND DIMENSION.¹

	12, 14, and 16 feet.	10, 18, and 20 feet.	22 and 24 ² feet.	Random.
2 by 2, No. 1 common.....	\$24.00	\$26.00	\$27.50	\$24.00
2 by 3, No. 1 common.....	22.50	23.50	25.00	22.50
2 by 4, No. 1 common.....	23.00	25.00	26.00	23.00
2 by 6, No. 1 common.....	21.50	22.50	24.00	21.50
2 by 8, No. 1 common.....	22.50	24.50	26.00	22.50
2 by 10, No. 1 common.....	23.00	25.00	26.50	23.00
2 by 12, No. 1 common.....	25.00	26.50	28.00	25.00
2 by 2, No. 2 common.....	22.50	24.50	26.00	22.50
2 by 3, No. 2 common.....	21.00	22.00	23.50	21.00
2 by 4, No. 2 common.....	21.50	23.50	25.00	21.50
2 by 6, No. 2 common.....	20.00	21.00	22.50	20.00
2 by 8, No. 2 common.....	21.00	23.00	24.50	21.00
2 by 10, No. 2 common.....	21.50	23.50	25.00	21.50
2 by 12, No. 2 common.....	23.50	25.00	26.50	23.50

¹ For 2-inch stock ordered kiln dried add \$2.

² For lengths over 24 feet add \$1 for each 2 feet up to and including 32 feet.

CAR SIDING, LINING AND ROOFING WORKED TO M. C. B. PATTERN.¹

	5 feet.	8 feet.	9 feet.	10 feet.	12 feet.	Random lengths lining.
1 by 4 B and better	\$36.00	\$35.00	\$39.00	\$38.00	\$37.00	\$34.00
1 by 6 B and better	36.00	35.00	39.00	38.00	37.00	36.50
1 by 4, No. 1 common	31.00	30.00	34.00	33.00	32.00	32.50
1 by 6, No. 1 common	31.00	30.00	34.00	33.00	32.00	33.00
1 by 4, No. 2 common	27.50	27.50	27.50	27.50	27.50	24.50
1 by 6, No. 2 common	27.50	27.50	27.50	27.50	27.50	25.50

¹ In car lining for specified lengths add \$1 per M feet.

STANDARD GRADE CAR DECKING.

2 by 6 and 8 inches, 9, 10, 18, and 20 feet, dressed to 1½ inches	\$29.00
2½ by 6 and 8 inches, 9, 10, 18, and 20 feet, dressed to 2½ inches	30.00
3 by 6 and 8 inches, 9, 10, 19, and 20 feet, dressed to 2½ inches	30.00

NO. 1 COMMON CAR DECKING,¹ DRESSED AND MATCHED OR SHIPLAPPED TO M. C. B. PATTERN.

	9 feet.	9 feet 6 inches.	10 feet.
2 by 6 and 8 inches	\$26.00	\$27.50	\$26.00
2 by 10 inches	28.50	30.00	28.50
2½ by 6 and 8 inches	27.00	28.50	27.00
2½ by 10 inches	31.00	32.50	31.00
3 by 6 and 8 inches	26.00	27.50	26.00
3 by 10 inches	30.00	31.50	30.00

¹ For heart faced decking, 6 and 8 inches, add \$3; for 10 inches add \$4.

CAR FRAMING, LONGLEAF SQUARE AND SOUND GRADES S4S TO ½-INCH SCANT AND CUT TO LENGTH.

Up to 8 inches, 20 feet and under	\$29.00
10 inches, 20 feet and under	32.00
12 inches, 20 feet and under	34.00
14 inches, 20 feet and under	39.00

CAR SILLS.

For price on car sills use timber list.

ROUGH PLANK AND TIMBERS, NO. 1 COMMON, CUT TO FULL SIZE.¹

	10 to 20 feet.	22 and 24 feet.	26 feet.	28 feet.	30 feet.	32 feet.
2 by 2	\$27.00	\$28.00	\$29.00	\$30.00	\$31.00	\$32.00
2 by 3	26.00	27.00	28.00	29.00	30.00	31.00
2 by 4	26.00	27.00	28.00	29.00	30.00	31.00
2 by 6	25.00	26.00	27.00	28.00	29.00	30.00
2 by 8	25.00	26.00	27.00	28.00	29.00	30.00
2 by 10	29.00	30.00	31.00	32.00	33.00	34.00
2 by 12	31.00	32.00	33.00	34.00	35.00	36.00
3 by 4 to 4 by 4	25.00	26.00	27.00	28.00	29.00	30.00
3 by 6 to 8 by 8	24.00	25.00	26.00	27.00	28.00	29.00
3 by 10 to 4 by 10	28.00	29.00	30.00	31.00	32.00	33.00
3 by 12 to 5 by 12	27.00	28.00	29.00	30.00	31.00	32.00
3 by 12 to 5 by 14 ²	30.00	31.00	32.00	33.00	34.00	35.00
6 by 12 to 12 by 12	29.00	30.00	31.00	32.00	33.00	34.00
3 by 12 to 5 by 14 ²	35.00	36.00	37.00	38.00	39.00	40.00
6 by 14 to 8 by 14 ²	34.50	35.50	36.50	37.50	38.50	39.50
10 by 14 to 14 by 14 ²	34.00	35.00	36.00	37.00	38.00	39.00

¹ For timbers over 32 feet add \$1 for each additional foot in length over 32 feet.
² For timbers over 14 inches in width, add \$3 for each 2 inches or fraction thereof.

GENERAL EXCEPTIONS.

[Add to foregoing prices per 1.000 feet b. m.]

	Amount to be added.
In No. 1 common plank and timbers for long leaf-----	\$2. 00
Add to No. 1 common long leaf for following grades:	
For sound and square edge-----	1. 00
For standard interstate rules, 1905, same as No. 1 long leaf.	
For merchantable, 1905, 10 inches and under-----	3. 00
For merchantable, 1905, 12 inches and under-----	2. 00
For prime interstate rules, 1905-----	5. 00
For 85 to 90 per cent cubical contents 12 inches and under-----	3. 00
For 85 to 90 per cent cubical contents 14 inches and under-----	3. 50
For 85 to 90 per cent cubical contents 16 inches and under-----	4. 50
For heart face, 1 face only, 12 inches and under-----	4. 50
For heart face, 1 face only, 14 inches and under-----	5. 00
For heart face, 1 face only, 16 inches and under-----	6. 00
For 75 per cent heart-girth measurement 12 inches and under-----	3. 50
For 75 per cent heart-girth measurement 14 inches and under-----	4. 50
For 75 per cent heart-girth measurement 16 inches and under-----	5. 50
For standard heart grade 12 inches and under-----	4. 00
For standard heart grade 14 inches and under-----	5. 50
For standard heart grade 16 inches and under-----	6. 50
For 85 to 90 per cent facial-area heart 12 inches and under-----	5. 00
For 85 to 90 per cent facial-area heart 14 inches and under-----	5. 50
For 85 to 90 per cent facial-area heart 16 inches and under-----	6. 50
For all heart 12 inches and under-----	7. 00
For all heart 14 inches and under-----	8. 00
For all heart 16 inches and under-----	10. 00

For surfacing add—	S1S or 2S.	S1S1E.	S4S.	S2S and T. and G.	Grooved for splines.
For 1 inch or less-----	\$0.50	\$0.50	\$1.00	\$1.00	-----
For 2 inches or less-----	-----	.50	1.00	1.50	\$4.00
For 3 inches or less-----	1.00	1.00	1.00	2.00	4.00
For 4 inches or less-----	1.00	1.00	1.00	2.00	4.00
For 5 inches or less-----	1.00	1.00	1.00	2.00	6.00
For 6 inches or larger-----	1.00	1.00	1.00	-----	6.00

Invoices shall be based on actual board-foot contents of the rough size and length ordered, except that thickness under 1 inch shall be based on 1 inch.

When stock ordered cut to odd length sufficient amount should be added to price of next longer even length to cover waste in cutting into odd lengths.

Pieces ordered larger at one end than at the other, or wider on one side than the other, shall be computed as of the larger end or wider side.

All sizes which include fractions under one-half inch shall take the same price as the next lower inch listed. Sizes which include fractions one-half inch or over shall take the same price as the next higher inch listed. Example: 5½ by 8½ would take the price of 5 by 10 inches. Add \$1 to list when ordered to cut on fractional size.

Lengths which include odd inches shall take the same base price as the next longer length listed, with allowance for odd lengths added (see general exceptions). Example: 4½ by 8½, 28 feet 6 inches, would take the base price of 4 by 10, 30 feet, to which would be added the allowance for odd lengths.

WESTERN SPRUCE.

At a conference of spruce manufacturers of Washington and Oregon and representatives of the Signal Corps of the United States Army, Aircraft Production Board, the British, French, and Italian commissions, and the lumber committee of the Council of National Defense, held in July, 1917, the spruce manufacturers agreed to furnish aircraft spruce of specified quality and size during the remainder of the year at \$105 per thousand board feet.

On April 10, 1918, the spruce production division of the Signal Corps, United States Army, issued a new schedule of prices for western spruce and Port Orford cedar airplane material. The prices for "A" wing beam stock of western spruce and Port Orford cedar was set at \$175 per thousand board feet f. o. b. mill; "B" long clears at \$80 per thousand board feet f. o. b. mill; and "C" short and thin clears at \$45 per thousand board feet f. o. b. mill. The price for western spruce cants for aircraft material, grade 1, was set at \$90 per thousand board feet f. o. b. mill; grade 2, \$50 per thousand feet f. o. b. mill. These prices remained in effect throughout the remainder of the year.

TREENAILS.

The first control of the price of treenails was exercised by the Emergency Fleet Corporation in the adoption of the schedule of prices of April 1, 1918. This schedule was revised on July 11, 1918, and on July 31, 1918. The first revision allowed an increase in prices of 30 per cent and the second one of 20 per cent, to be retroactive through July 12, 1918. On November 22, 1918, again, the schedule of July 31, 1918, was indefinitely extended without change.¹

[Prices per thousand pieces f. o. b. shipping points fixed for black or yellow locust square treenails, purchased in 1½-inch squares cut ⅜ to ½ inch full for use in Government hulls, inspections at cars.]

APRIL 1, 1918.

Lengths.	Prices.	Lengths.	Prices.
<i>Inches.</i>		<i>Inches.</i>	
10	\$17.50	32	\$67.75
12	21.25	34	74.50
14	25.00	36	81.25
16	29.00	38	88.50
18	33.00	40	96.00
20	37.00	42	105.75
22	41.50	44	116.25
24	46.25	46	127.00
26	51.25	48	138.25
28	56.25	50	150.00
30	61.50		

EFFECTIVE JULY 12, 1918.²

Lengths.	Prices 1½-inch squares.	Lengths.	Prices 1½-inch squares.
<i>Inches.</i>		<i>Inches.</i>	
10	\$20.70	32	\$105.60
12	25.20	34	116.40
14	29.70	36	127.20
16	34.20	38	138.00
18	38.70	40	150.00
20	43.20	42	164.40
22	48.60	44	181.20
24	72.00	46	198.00
26	80.40	48	216.00
28	87.60	50	234.00
30	96.00		

¹ Memorandum from the supply and sales division of the Emergency Fleet Corporation.

² This schedule was adopted on July 31, 1918, but was made retroactive to July 12, 1918.

NOTE.—Allowance for turning is \$10 per 1,000 pieces if single drift or \$15 if double drift. Price for 1½ inch squares is \$6 per thousand pieces less than those shown above. Intermediate lengths at average of next highest and next lowest.

8. BUILDING MATERIALS.

Price control was exercised over the following building materials, other than lumber: Brick, gypsum wall board, gypsum plaster board, hollow building tile, millwork, Portland cement, sand, gravel and crushed stone. The prices here scheduled applied only to Government purchases.¹

BRICK.

The following schedule showing the prices of brick fixed by the price-fixing committee was issued on February 26, 1919:

No.	Districts.	Hard-burned brick.	Light-burned or salmon brick.	Period covered.
		<i>Per M.</i>	<i>Per M.</i>	
2	Metropolitan, New York.....	\$11.50	\$9.50	July 1, 1918, to Oct. 31, 1918.
	Do.....	12.50	10.50	Nov. 1, 1918, to Nov. 30, 1918.
4	Philadelphia, Pa.....	16.50	14.50	July 1, 1918, to Oct. 31, 1918.
	Do.....	17.50	15.50	Nov. 1, 1918, to Jan. 31, 1919.
5	Washington, D. C. ²	14.00	12.00	July 1, 1918, to Oct. 31, 1918.
	Do.....	15.00	13.00	Nov. 1, 1918, to Jan. 31, 1919.
5	Baltimore, Md.....	15.00	13.00	July 1, 1918, to Oct. 31, 1918.
	Do.....	16.00	14.00	Nov. 1, 1918, to Jan. 31, 1919.
1	New England States.....	17.50	15.50	
	New York east of Mechanicsville.....	12.50	10.50	
3	New Jersey north of Trenton.....	16.50	14.50	
	Long Island, N. Y.....	13.50	11.50	
5	Virginia ³			Covering all allocations at tentative prices between July 1, 1918, and Feb. 27, 1919.
	Part of North Carolina ³			
6	Southern States ⁴			
8	Western Pennsylvania ⁵	16.00		
9	Ohio ⁶	16.00	14.00	
10	Illinois.....	15.50	13.50	
12	Mansfield, Ark.....	15.00	13.00	
	Coffeyville, Kans.....	12.00	10.00	
14	Tucson, Ariz.....	14.00	12.00	
16	St. Louis, Mo.....	16.50	14.50	
18	Chicago, Ill.....	11.00	9.00	
		⁷ 14.50	⁷ 14.50	

¹ See report of Mr. Richard L. Humphrey, director of the building materials division of the War Industries Board.

² Price fixed on face common brick, \$16, July 1, 1918, to Oct. 31, 1918. Price fixed on face common brick \$17, Nov. 1, 1918, to Jan. 31, 1919.

³ Brick costs in group No. 5 varied so greatly that it was necessary to fix prices on individual plants. Prices on hard brick range from \$11 to \$16; prices on light-burned or salmon brick range from \$9 to \$14.

⁴ Brick costs in group No. 6 varied so greatly that it was necessary to fix prices on individual plants. Prices on hard brick range from \$10.50 to \$18; prices on light-burned or salmon brick range from \$8.50 to \$13.

⁵ Except one plant, Johnsonburg, Pa., \$18.42 for hard brick.

⁶ Except one plant, Spring Wells, Mich., \$14.50 for hard brick and \$12.50 for light-burned or salmon brick. The prices are all per M brick, f. o. b. cars, trucks, or barges at plants; an additional of \$2 per M was allowed where brick had to be trucked outside of the plant to the nearest railroad siding or where delivered over rail at dock. They are based on not less than 75 per cent hard-burned brick nor more than 25 per cent light-burned or salmon brick.

⁷ Sand lime brick.

GYPSUM WALL BOARD AND PLASTER BOARD.

Pending the establishment of fixed prices, all orders were allocated at tentative prices.

On February 27, 1919, the price-fixing committee established the following maximum prices, applicable to purchases at tentative prices made by Government agencies during the year 1918.

GYPSUM WALL BOARD.

Prices on $\frac{3}{8}$ -inch thick, 32 and 48 inches wide, and of varying lengths, for four firms, among whom the orders were allocated at \$22 and \$23.¹

GYPSUM PLASTER BOARD.

Prices on $\frac{3}{8}$ -inch thick, 32 and 36 inches wide, and varying lengths, allocated among 10 firms at prices ranging from \$18 to \$28.¹

The price for $\frac{1}{8}$ -inch plaster board was \$1 per thousand square feet less than for the $\frac{3}{8}$ -inch.

HOLLOW BUILDING TILE.

Prices of hollow building tile were first fixed for the period ending July 1, 1918, and were advanced slightly for the period from July 1, 1918, to January 1, 1919.

JULY 25, 1918.

At a meeting of the price-fixing committee of the War Industries Board, Thursday, July 25, 1918, the following prices for hollow building tile were fixed for Government purchases made on the tentative basis prior to July 1, 1918:

	Per ton.
Perth Amboy, N. J.....	\$9. 00
St. Marys, Pa.....	7. 20
Canton, Ohio.....	6. 75
Terre Haute, Ind.....	6. 75
Louisville, Ky.....	8. 10
Birmingham, Ala.....	8. 55
Mason City, Iowa.....	7. 20
Coffeyville, Kans.....	7. 20

The following tentative prices for Government purchases, made prior to July 1, 1918, are to be subject to final action by the price-fixing committee upon presentation of additional data by the Federal Trade Commission:

	Per ton.
Elmendorf, Tex.....	\$10. 00
Athens, Tex.....	10. 00
Salt Lake City, Utah.....	10. 00
Los Angeles, Calif.....	10. 00
Lincoln, Calif.....	10. 00
Seattle, Wash.....	10. 00

¹ Prices were per thousand square feet f. o. b. cars at the plants of the companies named.

DECEMBER 7, 1918.

At a meeting of the price-fixing committee of the War Industries Board, Saturday, December 7, 1918, the following prices on hollow building tile were fixed for Government purchases made during the period from July 1, 1918, to January 1, 1919:

	Per ton.
Perth Amboy, N. J.....	\$9.75
St. Marys, Pa.....	7.95
Canton, Ohio.....	7.50
Terre Haute, Ind.....	8.00
Louisville, Ky.....	8.10
Birmingham, Ala.....	8.55
Mason City, Iowa.....	7.20
Coffeyville, Kans.....	7.20
Elmendorf, Tex.....	11.00
Athens, Tex.....	11.00
Salt Lake City, Utah.....	10.00
Los Angeles, Calif.....	10.00
Lincoln, Calif.....	10.00
Seattle, Wash.....	10.00

The above prices are based upon standard, scored commercial kiln run tile, meeting the requirements of the attached specification. If smooth or face tile is required, there will be an additional allowance of \$1 per ton. If salt-glazed tile is required, there will be an allowance of \$1.50 per ton. If jamb tile is required, there will be an additional allowance of \$2 per ton on the same weight basis as the same full size ordinary tile. Fractional portions of ordinary tile shall carry the same ratio of price of such tile as that of the fraction represented.

On the above basis, at the points named f. o. b. cars plant with present rates of freight added, destination prices will be figured subject to increases in accordance with any increase which may be made in freight rates. Freight charges are to be paid by the purchaser and shipments must be consigned to a Government officer, or if consigned to other than a Government officer, must be accompanied by a certificate (Form 750) signed by a Government officer stating that the tile is for Government use and that any saving will accrue to the benefit of the Government, otherwise the purchaser must also pay the war tax on the freight charges. Shipments are to be made freight collect, and for convenience in billing invoices will be rendered on the basis of the above-named prices plus the current freight rate. In payment of the account, the freight charges paid by the Government departments or their contractors will be deducted from the total amount of the invoices. When shipments are required freight prepaid, Form 750, furnished by the Commissioner of Internal Revenue, must be signed by the officer in charge of the work in question, and forwarded to the shipping company with the order, who will file this certificate with the railroad company at the time the first shipment is made on the order.

PARTITION TILE.

Basing weight (pounds).	Cells.	Standard weight.	Minimum weight.
16 (4 by 12 by 12).....	3	16	15
22 (6 by 12 by 12).....	3	22	21

BACK OF TILE.

14 (5 by 8 by 12).....	.....	16	15
8 (4 by 5 by 12).....	.....	9	8

HEAVY-DUTY TILE.

28 (6 by 12 by 12).....	3	28	26
36 (8 by 12 by 12).....	6	36	34
54 (12 by 12 by 12).....	6	48	46

The number of cells and weight shown represent the average commercial practice and there shall be no objection to a manufacturer furnishing a larger number of cells or heavier tile to meet his local conditions. The standard weights, as shown, represent the average weight of the tile to be furnished but tile of minimum weight, as shown, shall be accepted, it being understood that this variation is necessary due to wear and renewal of dies.

The basing weights, as shown, are for use in reaching prices per thousand pieces on each size, as shown, in connection with the tentative building prices; also final prices when fixed. Some variations have been made from actual and average weight to allow differences in cost of manufacturing the various sizes as determined by the custom and experience of the trade.

All tile to be furnished under these specifications shall pass the following test requirements for absorption:

Not less than three test specimens shall be dried at a temperature of approximately 212° Fahrenheit until by weighing and reweighing the weight remains constant.

They shall then be continuously immersed in clear water for a period of 48 hours with only the upper surface of the tile exposed to the air.

Upon being removed from the water they shall be allowed to drain for a period of not more than one minute and the superficial water removed by a towel or similar means, and the test specimen shall then be weighed. The absorption thus obtained shall not exceed an average of 10 per cent of the weight of the tile when dried.

The tile to be furnished is to be commercial tile; that is, it includes tile which are somewhat cracked, warped, and broken, not affecting the usefulness of the tile. Inspection is to be made at the factory.

MILLWORK.

On December 2, 1918, the price-fixing committee approved prices recommended by the director of the building-materials division for all orders placed during the month of December and expiring December, 31, 1918.¹

The schedules follow:

MILLWORK.

December 1, 1918, to January 1, 1919.

GLAZED WINDOWS AND SASH.

Wood: White pine, oil primed, or yellow pine.

Glass: S. S. B.

Layout: Regular western openings.

Windows:

9 by 12 by 1½ inches, 8 light, Ck. rail	\$1. 67
10 by 12 by 1½ inches, 8 light, Ck. rail	1. 69
9 by 12 by 1½ inches, 12 light, Ck. rail	2. 10
9 by 12 by 1½ inches, 12 light, Ck. rail	2. 34
10 by 12 by 1½ inches, 12 light, Ck. rail	2. 19
10 by 14 by 1½ inches, 12 light, Ck. rail	2. 46
10 by 15 by 1½ inches, 12 light, Ck. rail	2. 73
10 by 16 by 1½ inches, 12 light, Ck. rail	2. 88
10 by 18 by 1½ inches, 12 light, Ck. rail	3. 29

Sash:

10 by 12 by 1½ inches, 4 light	. 95
10 by 12 by 1½ inches, 6 light	1. 22
10 by 14 by 1½ inches, 4 light	1. 05
10 by 14 by 1½ inches, 6 light	1. 34
10 by 15 by 1½ inches, 4 light	1. 19
10 by 15 by 1½ inches, 6 light	1. 40
10 by 16 by 1½ inches, 6 light	1. 50
10 by 12 by 1½ inches, 12 light, heavy center bar	2. 30
10 by 14 by 1½ inches, 12 light, heavy center bar	2. 64
10 by 15 by 1½ inches, 12 light, heavy center bar	2. 87
10 by 16 by 1½ inches, 12 light, heavy center bar	3. 03

Cellar sash:

8 by 10 by 1½ inches, 2 light, 1/9 by 1/3	. 56
9 by 12 by 1½ inches, 2 light, 1/11 by 1/5	. 62
10 by 12 by 1½ inches, 2 light, 2/1 by 1/5	. 65
8 by 10 by 1½ inches, 3 lights, 2/4 by 1/3	. 67
9 by 12 by 1½ inches, 3 lights, 2/7 by 1/5	. 75
10 by 12 by 1½ inches, 3 lights, 2/10 by 1/5	. 80

¹ Price-Fixing Committee, Minute Book XI, Dec. 2, 1918.

Transoms :

2/8 by 1/2 by 1 1/2 inches, 1 light	\$0. 67
2/8 by 1/2 by 1 1/2 inches, 1 light	. 72
2/10 by 1/2 by 1 1/2 inches, 1 light	. 73
3/0 by 1/2 by 1 1/2 inches, 1 light	. 76
3/4 by 1/2 by 1 1/2 inches, 3 lights wide	1. 49
2/4 by 1/10 by 1 1/2 inches, 2 lights wide	. 94
2/6 by 1/10 by 1 1/2 inches, 2 lights wide	1. 05
2/8 by 1/10 by 1 1/2 inches, 3 lights wide	1. 10
3/0 by 1/10 by 1 1/2 inches, 3 lights wide	1. 16
3/4 by 1/10 by 1 1/2 inches, 3 lights wide	1. 49
4/8 by 1/10 by 1 1/2 inches, 5 lights wide	1. 88
5/0 by 1/10 by 1 1/2 inches, 5 lights wide	2. 08
5/4 by 1/10 by 1 1/2 inches, 5 lights wide	2. 19
6/0 by 1/10 by 1 1/2 inches, 6 lights wide	2. 32
6/8 by 1/10 by 1 1/2 inches, 6 lights wide	2. 99
2/8 by 2/0 by 1 1/2 inches, 3 lights wide	1. 16
2/10 by 2/0 by 1 1/2 inches, 3 lights wide	1. 30
3/0 by 2/0 by 1 1/2 inches, 3 lights wide	1. 33
3/4 by 2/0 by 1 1/2 inches, 3 lights wide	1. 74
4/8 by 2/0 by 1 1/2 inches, 5 lights wide	2. 04
5/0 by 2/0 by 1 1/2 inches, 5 lights wide	2. 27
5/4 by 2/0 by 1 1/2 inches, 5 lights wide	2. 28
6/0 by 2/0 by 1 1/2 inches, 6 lights wide	2. 75
6/8 by 2/0 by 1 1/2 inches, 6 lights wide	3. 51

NOTE.—Other sizes of glazed sash not specified, will take same basis as above, which is 63 1/2 per cent discount from the universal list.

EXTRAS.

The above prices apply to goods in full-stock quantities for shipment in carload lots. For less than carload shipments add 10 per cent to cover extra handling. When goods are packed for protection in local shipments packing charges as follows will apply :

	Net per bundle.
Under 60 united inches, add	\$0. 25
Over 60 and up to 100, inclusive, add	. 50
Over 100 united inches, add	1. 00

Skylight sash, 6/7 1/2 by 5/4 1/2, 3 1/2 inches thick, 4 lights, 18 by 60, open (in full carloads), \$6.82.

PANEL DOORS.

Wood : Pine.
Layout : May be 4 panel, 5 regular panel, or 5 cross panel.
Sticking : May be O. G., B. and C., or C. and B.
Panels : Flat or beveled raised.
Grade : May be No. 1 and No. 2 mixed, about 80 per cent No. 1.

	White pine.	Yellow pine.
2/0 by 6/8 by 1 1/2 inches	\$2. 09	\$1. 88
2/2 by 6/8 by 1 1/2 inches	2. 09	1. 88
2/4 by 6/8 by 1 1/2 inches	2. 15	1. 94
2/6 by 6/8 by 1 1/2 inches	2. 17	1. 96
2/8 by 6/8 by 1 1/2 inches	2. 20	1. 98
2/10 by 6/8 by 1 1/2 inches	2. 50	2. 26
3/0 by 6/8 by 1 1/2 inches	2. 66	2. 40
3/4 by 6/8	3. 63	3. 27
3/4 by 6/8 by 1 1/2 inches	5. 31	4. 79
2/0 by 7/0 by 1 1/2 inches	2. 49	2. 24
2/6 by 7/0 by 1 1/2 inches	2. 51	2. 27
2/8 by 7/0 by 1 1/2 inches	2. 56	2. 31
3/0 by 7/0 by 1 1/2 inches	2. 75	2. 48

NOTE.—Doors of other sizes will take the same discount if standardized and ordered in quantities. The base discount is: White pine doors, 68 1/2 per cent from universal list; yellow pine doors, 10 per cent less.

Wide lock rail and cut for Dutch door, add 75 cents net.
If 8 foot 4-inch doors are ordered in lots of less than 10, add 20 per cent.
If ordered in less than carload orders, 10 per cent advance on all items.
Doors with six panels, basis 67 1/2 per cent from 5X panel O. G. No. 1 list.
Doors made with slat panels, add 50 cents net per panel.

SASH DOORS.

Layout: 8X panel and 2 lights or 2 upright panels and 4 lights.
Glazing: S. S. B.
Sticking: O. G., B. and C., or C. and B.
Panels: Flat or beveled raised.
Grade: No. 1 and No. 2 mixed, about 80 per cent No. 1.
Wood: Pine.

	White pine.	Yellow pine.
2/4 by 6/8 by 1 1/2 inches.....	\$3.22	\$3.01
2/6 by 6/8 by 1 1/2 inches.....	3.22	3.01
2/8 by 6/8 by 1 1/2 inches.....	3.30	3.08
2/10 by 6/8 by 1 1/2 inches.....	3.63	3.39
3/0 by 6/8 by 1 1/2 inches.....	3.85	3.50
3/4 by 6/8 by 1 1/2 inches.....	4.79	4.42
3/4 by 6/8 by 1 1/2 inches.....	6.47	5.94
2/6 by 7/0 by 1 1/2 inches.....	3.63	3.39
2/8 by 7/0 by 1 1/2 inches.....	3.83	3.58
3/0 by 7/0 by 1 1/2 inches.....	4.24	3.96

Sash doors other than above:

2/8 by 6/6 by 1-3/8 inches, 2X panel or 2 upright panels and 6 lights, SSB stops.....	\$3.51
2/8 by 6/6 by 1-3/8 inches, 2X panel or 2 upright panels and 9 lights, SSB stops.....	4.51
2/8 by 6/6 by 1-3/8 inches, 2X panel or 2 upright panels and 12 lights, SSB stops.....	4.63
2/8 by 6/6 by 1-3/8 inch French doors, 18 lights, SSB stops.....	5.85
2/8 by 6/6 by 1-3/8 inch French doors, 10 lights, SSB stops.....	4.65

The above prices are obtained by using the panel-door basis plus cost of glass and reasonable profit.

BATTEN DOORS.

Sizes: 8/0 by 8/0 to 10/0 by 12/0.
Construction: Standard detail.
Grade: Sound paint quality, mixed woods permitted.
Price: Doors with no glass, per square foot, \$0.28; glazing, add per light 10 by 15 or less, 20 cents; larger sizes, extra price.

W. C. DOORS.

One and one-eighth inches thick, 4X panel, Nos. 1 and 2; no lugs:

	White pine.	Yellow pine.
2/0 by 4/0.....	\$1.32	\$1.19
2/0 by 4/6.....	1.49	1.34
2/4 by 4/6.....	1.54	1.39
2/4 by 4/8.....	1.82	1.64

NOTE.—All foregoing prices apply to goods ordered in full-stock quantities for shipment in carload lots. For less than carload shipments, add 10 per cent to cover extra handling. Packing goods for protection on local shipments:
Panel doors, 3/0 by 7/0 and smaller, add \$0.35 net per bundle; larger than 3/0 by 7/0, add \$0.02 net per square foot S. M.
Sash doors, 3/0 by 7/0 and smaller, add \$0.60 net per bundle; larger than 3/0 by 7/0, add \$0.03 net per square foot S. M.

HARDWOOD DOORS.

Birch cross panel, 1 1/2 inches, 64 1/2 per cent discount from the cross panel B. & C. universal list, making a 2/8 by 6/8 door, \$2.57.
For two-panel doors, add \$0.20 net.

DOOR FRAMES.

All door frames up to and including 2/10 by 6/10:	
Frame, detail "A," preliminary standard drawings.....	\$2.20
Frame, detail "B," preliminary standard drawings.....	2.42
Frame, detail "C," preliminary standard drawings.....	2.16
Frame, detail "D," preliminary standard drawings.....	1.23

SILLS AND SLIDES.

Cantonment sills, 26 cents net per piece.

Cantonment slides, 17½ cents net per piece.

NOTE.—The above prices apply to goods in full stock quantities for shipment in carload lots. For less than carload shipments, add 10 per cent to cover extra handling.

Prices all apply f. o. b. mills in South or Middle West. Prices f. o. b. Pacific coast mills should be lower than this basis, except possibly on glazed windows, but proper differentials have not been worked out for shipments from points east of Chicago or west of Mississippi River. Differentials above mill prices will have to be worked out based on freight costs.

FRAMES.

Box window frames for brick, K. D.: 9 by 12, 12 lights, 2/7½ by 4/6—Basis:	
\$86 per 1,000 feet b. m. exposed parts and \$75 for unexposed	\$2.55
Add for pulleys, \$0.24	
Extra: 15 cents net for putting boxes together, balance K. D.	
Casement frames, brick wall: 2/0½ by 3/5½	.88
D. C. window frames, type "A": 2/7½ by 4/6	2.09
Add for pulleys, \$0.24	
D. C. window frames, type "B": 2/7½ by 4/6	1.96
Add for pulleys, \$0.24	
Cellar frames "A": 8 by 10, 6 lights, opening 2/4½ by 2/1½	.91
Casement frames, open in "B": 8 by 10, 6 lights, opening 2/4½ by 2/1½	1.44
Casement frames, open out "C": 10 by 12, 6 lights, opening 2/0½ by 2/5½	1.71
Casement frames, open out "D": Opening 2/0½ by 3/5½	1.37
Casement frames, for brick, "E": Opening 2/0½ by 3/5½	1.18
Louvre frames: Half circle, 2/6 by 1/3 opening, circle 0/8, square 1/8	3.07
No wire screens or hinges.	
Rectangular louvre frames: 1/2 by 2/4	1.60
Louvre frames, peaks: 3/0 by 1/6	2.43

K. D. WINDOW FRAMES.

Special prices for cantonment construction:

Quality: Sound mixed woods for paint.

Construction: Pulley stiles, 1½ by 4; blind stops, 1½ by 1½; casing, 1½ by 3½; sill, 1½ by 3½; plain drip cap, 1½ by 1½; mullion, 5½. No pockets or pulleys.

10 by 12 to 10 by 15 and 10 by 16, 12 lights, single	\$1.50
10 by 12 to 10 by 15 and 10 by 16, 12 lights, double	3.10
10 by 12 to 10 by 15 and 10 by 16, 12 lights, triple	4.70
10 by 12 to 10 by 15 and 10 by 16, 12 lights, quadruple	6.30
For 1½ O. S. casing, add to base price per frame	.15
For pockets and pressed steel pulleys, per frame	.30
For 1½ sill, per frame	.10
For 5½ stud wall, per frame	.20
For 5½ jambs for plastered wall, per frame	.10

K. D. OUTSIDE DOOR FRAMES.

Jambs, 1½ by 4½, not rabbeted; stops, ½ by 1½ S&S; casing, 1½ by 3½; no sill.

Sizes 2/4 by 6/8 to 3/0 by 7/0 K. D.	\$1.50
For larger sizes, for every 4 inches in width or height, add	.10
For soft-wood sill, add to base price	.50
For 5½ stud wall	.30
For transom head 2/0 high or less, add to base price	.75

All f. o. b. factories in the Middle West. Taking rates to eastern and southern points not in excess of the rates from Oshkosh, Wis., Minneapolis, and Dubuque, Clinton, and Muscatine, Iowa.

EXTRAS.

The above prices apply to goods in full stock quantities for shipment in carload lots. For less than carload shipments, add 10 per cent to cover extra handling.

STAIRS.

Plain box stairs, 3/0 wide, K. D.:

Strings stuck to match room base.

Strings house ¾ inch thick.

Treads 1½ inches thick, risers 1½ inch thick.

No rough horses, newels, rails, or balusters, \$1.10 per riser.

If winders are shown, figure same as an extra riser.

Open stairs, 3/6 wide, K.D.:

Wall string housed ¾ inch thick.

Face string cut and mitered, ¾ inch thick.

Treads 1½ inches thick, mitered and arranged for balusters.

Nosings fitted, coves loose.

Risers (¾ inch thick) mitered, \$1.35 per riser.

If winders are shown, figure same as an extra riser.

Stair rail "A" with fillet	\$0.12½
Stair rail "B" with fillet	.11
Wall rail, 1½ inches round (no brackets)	per linear foot .06
Balusters as shown detail "C"	net .08
Balusters as shown detail "D"	do .05
Starting newels, type "F"	each 1.50
Starting newels, type "G"	do 1.00

Plain curb string same as for open stairs.
 Paneled string as shown, \$1.65 per riser.
 Well-hole skirting, figure on molding basis.
 (Type numbers taken from preliminary details.)
 Prices above will cover yellow pine or white pine for paint.

MOLDINGS.

	Per 1,000 b. m.
Yellow pine or soft wood for exterior based on finished product:	
All moldings worked from 1-inch stock	\$79.20
All moldings worked from 1½ or 1¾ inch stock	85.80
All moldings worked from 2-inch stock	92.40
Hardwood moldings:	
Gum worked from 1-inch stock	92.50
Calico ash, worked from 1-inch stock	112.20
Plain oak, worked from 1-inch stock	126.50
Brown ash, worked from 1-inch stock	126.50

All moldings using thicker stock will be based at higher prices, according to market prices.

Special prices for cantonment construction, on lattice ½ by 1½ inches, 44 cents per 100 linear feet.

Porch rails: On molding basis.

Porch brackets: Sawn to shape, \$100 per 1,000 b. m.

Porch panels, 20 cents per square foot, depending upon design.

Interior frames: Inside jambs, based on molding prices plus 2½ cents net each for gaining side jambs to receive head.

Exterior blinds: 1½ inches thick, stationary slats, 28 cents net per linear foot in height with a minimum price of \$1 per pair.

Exterior paneled shutters: 1½ inches thick, stock construction, 35 cents net per linear foot in height, not exceeding 2/10½ in width.

Exterior porch columns or newells: Built up, square, \$120 per 1,000 feet b. m. plus cap and base on molding basis.

Exterior porch newells or columns: Solid \$48, \$80 per 1,000 feet b. m.

NOTE.—Above prices apply to goods in full stock quantities for shipment in carload lots. For less than carload shipments, add 10 per cent for extra handling.

INTERIOR TRIM.

Special prices for cantonment construction:

Wood: Yellow pine and white pine.

Manufactured: Machine run out of rough lengths.

Casing: 13/16 by 3½, \$48.

Stool: ¾ by 1½.

Apron: 13/16 by 3½.

Stops: ¾ by 1.

Window trim:

10 by 12 to 10 by 15, 12 lights per side \$0.53

10 by 16 to 10 by 18, 12 lights per side .66

Sash trim:

10 by 12 to 10 by 16, 4 and 6 lights per side .29

Door trim:

2/0 by 6/8 to 3/0 by 7/0 per side .46

3/4 by 6/8 to 5/0 by 7/0 per side .53

For transoms head 2/0 or less, add .18

Inside jambs: Manufactured, run to exact widths and lengths and dadoed; shipped K. D.; stops cut to rough lengths; no transom heads:

Wood: Yellow pine.

Parts: Jambs 13/16 by 4½; stops ¾ by 1½.

2/8 by 6/8 to 3/0 by 7/0 \$0.77

3/4 by 6/8 to 6/0 by 7/0 .88

For transom head 2/0 or less, add .55

EXTRAS.

Above prices apply to goods in full stock quantities for shipment in carload lots. For less than carload shipments, add 10 per cent for extra handling.

All f. o. b. factories in the Middle West, taking rate to eastern and southern points not in excess of the rates from Oshkosh, Wis., Minneapolis, Dubuque, Clinton, and Muscatine, Iowa.

Medicine cabinets:

Stock design, arranged to fit in recess or hang on wall, plain (window glass)

mirror 14 by 18, set up, no hardware \$3.50

As per standard detail, plain plate mirror 5.50

Kitchen dressers: No. 1, sheet 58, 3/6 by 6/9 bottom case 18 inches deep, top case

14 inches deep, K. D.; no hardware 13.70

(June, 1918.)

Prices on pine lath, f. o. b. shipping point: No. 1, \$3.65; No. 2, \$2.65.

Special millwork.—Prices of roofers: Beaded, \$2 per thousand feet, overdressed two sides; grooved, \$1 per thousand feet, overdressed two sides.

PORTLAND CEMENT.

The cement committee of the Council of National Defense was organized in April, 1917. In July, 1917, an informal price agreement was made for the last six months of 1917, applying principally to purchases by the Army and the Navy.

By the recommendation of the War Industries Board, these prices were continued for Government purchases through the first four months of 1918.

On May 4, 1918, the price-fixing committee issued new schedules allowing increases in prices.¹ These prices were left substantially the same at the revision of August 23, 1918, until December 31, 1918, when price control ended.

NET PRICES ESTABLISHED BY PRICE-FIXING COMMITTEE FOR PORTLAND CEMENT PER BARREL F. O. B. CARS LOCATION NAMED, FOR 4-MONTH PERIODS ENDING AS INDICATED.

Location.	4 months ending—		
	Dec. 31, 1917–Apr. 30, 1918. ¹	Aug. 31, 1918. ¹	Dec. 31, 1918. ²
Hudson, N. Y.....	\$1.40	\$1.85	\$1.82
Lehigh Valley, Pa. (Northampton).....	1.30	1.75	1.72
Pittsburgh, Pa. (Universal).....	1.50	1.75	1.72
Fordwick, Va.....	1.40	1.70	1.67
Kingsport, Tenn.....	1.40	1.65	1.62
Richard City, Tenn.....	1.40	1.65	1.62
Bellevue, Mich.....	1.50	1.80	1.77
Mitchell, Ind.....	1.50	1.70	1.67
Buffington, Ind.....	1.50	1.60	1.57
Hannibal, Mo.....	1.50	1.70	1.67
LaSalle, Ill.....	.....	1.70	1.67
Steelton, Minn.....	1.55	1.70	1.67
Mason City, Iowa.....	1.55	1.70	1.67
Iola, Kans.....	1.50	1.75	1.72
Harrys, Tex.....	1.30	1.70	1.67
Houston, Tex.....	1.40	1.80	1.77
El Paso, Tex.....	1.90	1.95	1.92
San Antonio, Tex.....	.....	1.95	1.92
New Orleans, La.....	1.78	.....	.....
Trident, Mont.....	1.70	1.90	1.87
Portland, Colo.....	1.70	1.75	1.72
Devils Slide, Utah.....	.....	1.90	1.87
Brigham, Utah.....	.....	1.90	1.87
Salt Lake City, Utah.....	.....	1.90	1.87
Irwin, Wash.....	1.70	1.95	1.92
Concrete, Wash.....	.....	1.95	1.92
Seattle, Wash.....	1.90	.....	.....
Tacoma, Wash.....	1.70	.....	.....
Portland, Oreg.....	1.70	.....	.....
Oswego, Oreg.....	.....	2.00	1.97
Stockton, Calif.....	1.70	.....	.....
Oakland, Calif.....	1.70	.....	.....
San Francisco, Calif.....	1.70	.....	.....
Santa Cruz, Calif.....	1.70	.....	.....
Santa Barbara, Calif.....	1.70	.....	.....
Los Angeles, Calif.....	1.70	.....	.....
Cement, Calif.....	.....	1.95	1.92
Davenport, Calif.....	.....	1.95	1.92
Crestmore, Calif.....	.....	1.95	1.92

¹ Includes 3 cents per barrel for bin inspection.

² Does not include charge for bin inspection.

On the above basis, with freight added, prices were to be named f. o. b. cars at destination, based upon current rates of freight, subject to increase in destination prices in accordance with any increase which might be made in freight rates. The freight charges were to be paid by the purchaser and shipments to be consigned to a Government officer, or, if consigned to other than a Government officer, to be accompanied by a certificate (Form 750) signed by a Government officer, stating that the cement was for Government use, and that any saving would accrue to the benefit of the Government, otherwise the purchaser must also pay the war tax on the freight charges. Shipments were to be made

¹ Price-fixing committee, Minute Book III, May 4, 1918.

freight collect, and, for convenience in billing, invoices were to be rendered on the basis of the above-named prices, plus the current freight rate. In payment of the account the freight charges paid by the Government departments or their contractors was to be deducted from the total amount of the invoices. When shipments were required freight prepaid, Form 750, furnished by the Commissioner of Internal Revenue, were to be signed by the officer in charge of the work in question and forwarded to the shipping company with the order, who would file this certificate with the railroad company at the time the first shipment was made on this order.

The prices in the above table did not include any charge for cotton cloth and paper bags, paper-lined cloth bags, or wooden barrels. The charges were as follows:

For the last six months of 1917 and the first four months of 1918, no charge was made for cloth bags at the time of shipment, but any bags not returned to the mill in good condition, freight prepaid, were charged for at the rate of 15 cents each; for the four months beginning May 1, 1918, a charge of 10 cents for each cloth bag was made at the time of shipment, which amount was credited upon return of these bags in good condition to the point of shipment, freight prepaid, within 60 days from date of shipment; for the four-month period beginning September 1, 1918, a charge of 25 cents for each cloth bag was made at the time of shipment which amount was credited for each bag returned to the point of shipment in good condition, freight prepaid, within 60 days from the date of shipment. This increase in the charge for cloth bags was due to the increasing shortage resulting from inability to obtain new bags or to secure the return of bags at the lower charges of 10 and 15 cents when the replacement value was upwards of 25 cents per bag.

The charge for paper pags was as follows:

The last six months of 1917 and the first eight months of 1918, 2½ cents per bag; the last four months of 1918, 7½ cents per bag.

The additional charge for paper-lined cloth bags for the last six months of 1917 and the first four months of 1918 was 15 cents per bag for the lining and 15 cents for each cloth bag, which latter amount was credited upon the return of each cloth bag in good condition to the point of shipment, freight prepaid, within 60 days from the date of shipment.

The charge for wooden barrels for the last six months of 1917 was 45 cents, and for the first four months of 1918 was 60 cents per barrel for eastern mills, and for both periods 75 cents per barrel for western mills.

The prices fixed for the last four months of 1918 contained the provision that the charge for paper-lined cloth bags or wooden barrels (based on the cost) would be determined at the time the order was placed.

Previous to September 1, 1918, the cost of bin inspection was included in the price of cement. Inasmuch as all departments did not require bin tests, this charge was deducted from the prices fixed for the second four months of 1918, making the net prices established for the last four months 3 cents per barrel less than those for the previous period. A charge, however, of 3 cents per barrel was made where bin inspection was required, which requirement was usual with nearly all Government purchases.

Prices for the four-months' period beginning May 1, 1918, were 15 cents per barrel less, and for the four-months' period beginning September 1, 1918, 5 cents per barrel less, where the cement was shipped in bulk.

The terms were net cash 30 days; for the four-month period beginning May 1, 1918, a discount of 5 cents per barrel was allowed for cash payments in 10 days. This provision did not prove practicable and was not included in prices for subsequent periods.

SAND, GRAVEL, AND CRUSHED STONE.

The first prices were fixed for the New York district by the price-fixing committee July 10, 1918, effective to November 1, 1918. Prices for other districts followed later, and all expired on November 1, 1918.

(July 10, 1918.)

NEW YORK DISTRICT.

After considering data submitted by the Federal Trade Commission and in agreement with the representatives of the industry, the price-fixing committee has fixed the following prices on sand, gravel, and crushed stone:

	Per cubic yard.
Sand	\$0. 75
Gravel	1. 00
Crushed stone.....	1. 85

These prices are for full scow-load lots delivered f. o. b. scow, within the free lighterage limits of the port of New York, with 24-hour unloading privilege, and are effective for the period ending October 31, 1918. For deliveries made outside the free lighterage limits of New York may be added to the above prices the extra cost of towage.

(Aug. 28, 1918.)

METROPOLITAN PHILADELPHIA DISTRICT.

At a meeting of the price-fixing committee, held on Tuesday, August 28, the following maximum prices were fixed upon all Government sales effective for the period ending December 31, 1918, for the Metropolitan Philadelphia district; that is, for the States of New Jersey, Delaware, and Pennsylvania east of and including Harrisburg:

For deliveries in full scow-load lots, f. o. b. scow alongside, within the second towing zone:	Per ton.
Sand	\$0. 60
Gravel	1. 00
Crushed gravel f. o. b. cars wharf	1. 25
Unloading sand and gravel from scow to cars .....	. 25
For deliveries f. o. b. cars plant:	
Sand .....	. 55
Gravel .....	. 95
For deliveries in full scow-load lots between Marcus Hook and Port Penn on the Delaware River f. o. b. alongside:	
Sand	1. 00
Gravel	1. 15

The above carried a 24-hour free unloading privilege, with a flat charge of \$15 per scow for each 24 hours thereafter.

(Oct. 31, 1918.)

NORFOLK DISTRICT.

At a meeting of the price fixing committee held on Thursday, October 31, the following maximum prices were fixed to cover purchases, whether by the Government or otherwise, and to be effective for the period ending February 28, 1919, for the Norfolk district, i. e., the State of Virginia south of and including Petersburg, and the States of North Carolina and South Carolina:

For deliveries in full barge lots, f. o. b. point of origin, or f. o. b. cars plant, per ton of 2,000 pounds net:

Sand	\$0. 50
Gravel .....	. 95
Crushed stone	1. 30
Crushed granite	1. 75

Not including railroad ballast or screenings.

(Nov. 7, 1918.)

METROPOLITAN PHILADELPHIA DISTRICT.

At a meeting of the price fixing committee held on Thursday, November 7, a maximum price of \$1.50 per ton (2,000 pounds) f. o. b. cars plant was fixed for all Government purchases of crushed stone (other than railroad ballast or screenings) for the period ending December 31, 1918, within the Metropolitan Philadelphia district, i. e., for the State of New Jersey, south of and including Trenton; the State of Delaware and the State of Pennsylvania, east of and including Harrisburg.

9. CHEMICALS.

The following table summarizes the essential facts concerning the public regulation of the prices of chemicals during the war. The more detailed regulations pertaining to the great groups of chemicals are shown after the summary table.

Commodities.	Agency.	Date when effective.	Date of expiration.	Price.
Acids	P. F. C.....			F. o. b. works.
Sulphuric acid.....		June 28, 1918.....	Jan. 1, 1919.....	
60° Baumé.....				\$18 per short ton.
66° Baumé.....				\$28 per short ton.
20 per cent oleum.....				\$32 per short ton.
60° Baumé.....		Sept. 30, 1918.....		\$16 per short ton.
66° Baumé.....		do.....		\$25 per short ton.
20 per cent oleum.....		do.....		\$28 per short ton.
Nitric acid—				
42° Baumé.....		June 28, 1918.....	Jan. 1, 1919.....	8½ cents per pound.
Mixed acids—				
No. 1.....			do.....	\$6.90 per hundred-weight.
No. 2.....				\$13.10 per hundred-weight.
Alkalis:				
Bleaching powder....	Board of appraisers.	April, 1918.....	Nov. 25, 1918....	\$0.0235 per pound.
Carbon tetrachloride.	W. I. B., informal.	do.....		
Dry.....				\$0.15 per pound.
Fire extinguisher.				\$0.17 per pound.
Carbon tetrachloride.	Board of appraisers.	August, 1918.....	December, 1918.	
Dry.....				\$0.145 per pound.
Fire extinguisher.				\$0.165 per pound.
Caustic soda, 76 per cent.	W. I. B., informal.	Spring, 1918.....	December, 1918.	\$3.50 per hundred-weight f. o. b. cars at sellers' plants.
Chlorine, liquid.....	do.....	May, 1918.....	Nov. 25, 1918....	\$0.075 per pound.
Soda ash, 58 per cent.	do.....	do.....	do.....	\$1.57 per hundred-weight f. o. b. sellers' plants.
Ammonia	Food administrator.	Nov. 19, 1917.....		
Anhydrous.....				\$0.30 per pound, carload lots.
Aqua.....				\$0.0825 per pound, carload lots.
Ammonium sulphate....	War Department.	December, 1917...	Dec. 14, 1918.....	\$0.045 per pound f. o. b. point of production.
Arsenic.....	Food administrator.	Feb. 28, 1918.....		\$0.09 per pound, carload lots f. o. b. plants.
Castor beans.....		Fall, 1917.....	December, 1918.	\$3.50 per bushel of 46 pounds.
		October, 1918.....		\$4.50 per bushel of 46 pounds.
	W. T. B.....	February, 1918...		\$3.50 per bushel of 46 pounds from near-by countries; \$4.50 from other countries.
		October, 1918.....		\$4.50 from all sources.
Castor oil.....	Bureau Aircraft Production.	Fall, 1918.....	December, 1918..	
Conforming to Specification No. 3500-A of Signal Corps.				\$0.244 per pound.
Other oil.....				\$0.224 per pound.

Commodities.	Agency.	Date when effective.	Date of expiration.	Price.
Glycerin.....	Food administrator.	July 30, 1918.....	.....	F. o. b. points of production.
		August-September.	.....	\$0.60 per pound.
		October-November.	.....	\$0.58 per pound.
		December.....	.....	\$0.56 per pound.
Nitrate of soda.....	Nitrate commission.	.....	.....	95 per cent nitrate. 96 per cent nitrate.
		January-June, 1918.	.....	Per cwt. \$4.225 Per cwt. \$4.25
		June, 1918.....	.....	4.05 4.10
		July, 1918.....	.....	4.10 4.20
		August, 1918.....	.....	4.32½ 4.45
		September, 1918.....	.....	4.32½ 4.50
		October-November, 1918.	.....	4.40 4.52½
		December, 1918.....	.....	4.42½ 4.55
Quebracho.....	W. T. B.	May 6, 1918.....	July 10, 1918.....	\$0.065 per pound.
Smokeless cannon powder	Congress.	Feb. 13, 1913.....	.....	\$0.53 per pound.
Sulphur.....	W. I. B., informal.	June 7, 1918.....	Dec. 31, 1918.....	\$22 per long ton f. o. b. mines.
Toluol.....	Ordinance Department.	Feb. 1, 1918.....	.....	\$1.50 per gallon.
	W. I. B., informal.	June, 1918.....	.....	Do.
Wood chemicals.....	W. I. B. with War Department.	.....	Dec. 14, 1918.....	F. o. b. shipping point.
Acetate of lime.....		Dec. 24, 1917.....	.....	\$0.04 per pound.
Acetic acid, commercial, 100 per cent.		Feb. 13, 1918.....	.....	\$0.14½ per pound.
Acetic acid, glacial.....		do.....	.....	\$0.19 per pound.
Acetic anhydride. 85 per cent.		Dec. 24, 1917.....	.....	\$0.85 per pound.
Acetone.....		do.....	.....	\$0.25½ per pound.
Alcohol, methyl, pure		do.....	.....	\$0.86 per gallon.
Alcohol, wood—				
Crude.....		do.....	.....	\$0.50 per gallon.
Denaturing grade		do.....	.....	\$0.79 per gallon.
Refined, 96 per cent.		do.....	.....	Do.
Refined, 97 per cent.		do.....	.....	\$0.82 per gallon.
Ethyl methyl ketone.....		do.....	.....	\$0.25½ per pound.
Formaldehyde.....		Feb. 12, 1918.....	.....	\$0.15½ per pound.
Methyl acetate.....		Feb. 20, 1918.....	.....	\$0.21 naked at plant.
Methyl acetone.....		Dec. 24, 1917.....	.....	\$0.86 per gallon.
Wool grease.....	P. F. C.	Sept. 17, 1918.....	Dec. 17, 1918.....	\$0.16 per pound f. o. b. shipping point.

ACIDS.

On June 28, 1918, the price fixing committee announced the following maximum prices of sulphuric and nitric acids, which were revised on September 30, 1918. Control was lifted on January 1, 1919.

June 28, 1918.

Sulphuric acid:	Per ton of 2,000 pounds.
60° B.....	\$18
66° B.....	28
20 per cent oleum.....	32

F. o. b. at manufacturers' works in sellers' tank cars.
In carboys in carload lots one-half cent per pound extra.
In carboys in less than carloads three-fourths cent per pound extra.
In drums, any quantity, one-fourth cent per pound extra.
Nitric acid, 42° B., 8½ cents per pound f. o. b. manufacturers' works in carboys.

A schedule of maximum prices on mixed acids was prepared and published later.¹

¹ Letter to Mr. Brookings from Mr. Bruner, of the acids and heavy chemicals section, dated July 19, 1918: "After a somewhat lengthy discussion it was decided that the price for mixed acids shall be determined as fixed governmental prices for the acidity contents of the component acids, with no additional charge for mixing."

The above maximum prices were agreed upon for the public as well as the Government. It was understood and agreed that any deliveries made after September 30 would be subject to any revision in price which the Government might make for deliveries after that date.

ALKALIS.

The alkali section of the War Industries Board was organized April 15, 1918. Previous to this time efforts to control the prices of alkalis had been made by the alkali section of the chemical committee of the Council of National Defense in cooperation with the Chemical Alliance (Inc.).

Bleaching powder.—In April, 1918, a tentative Government price of \$0.0235 per pound was agreed upon. On later compulsory orders¹ the alkali section and the procurement division of the Ordnance Department recommended a price of \$0.0235 per pound for prime bleach, basis 35 per cent chlorine f. o. b. makers' plants. This was reduced to \$0.02 by the board of appraisers, but compulsory orders for November deliveries still carried the price of \$0.0235. Fixed prices were canceled on November 25, 1918.

Carbon tetrachloride.—In April, 1918, the alkali section recommended a price of 15 cents per pound on dry carbon tetrachloride and 17 cents per pound on fire extinguisher of the carbon tetrachloride type. These prices were reduced to 14½ cents and 16½ cents by the board of appraisers and the latter prices became effective from August, 1918, until the orders were canceled at the end of the year. During this time the entire output of all producers was commandeered by the Government.

Caustic soda.—A price of \$3.50 per hundredweight for the 76 per cent caustic soda, in bags f. o. b. cars at sellers' plants, was set in the spring of 1918 to apply to the Government purchases of caustic soda. Prices for other grades were in proportion to the base prices. These prices continued until the close of 1918, when all restrictions were removed.

Liquid chlorine.—Beginning May, 1918, the total output of liquid chlorine was commandeered by the Government at a price of 7½ cents per pound, in Government containers f. o. b. makers' plants. This price prevailed throughout the remainder of the war period. Restrictions were removed November 25, 1918.

Soda ash.—The Government fixed the price of soda ash early in 1918 at \$1.57 per hundredweight for the 58 per cent soda ash in bags f. o. b. sellers' plant. These prices continued in effect until November 25, 1918.

AMMONIA.

The first agreement affecting the price of ammonia was made on November 19, 1917, between the producers of ammonia and the Food Administration. The terms of the agreement are given below.

On January 3, 1918, the President issued a proclamation licensing the output of "ammonia, ammoniacal liquors, and ammonium sulphate from whatever source produced." Licenses were to be secured on or before January 21, 1918, and the Secretary of Agriculture was to direct the carrying out of the provisions of the proclamation. The prime products of ammonia as produced in by-product coke-oven plants, coal gas plants, and nitrogen fixation plants were those affected by the proclamation.

The prices fixed in the earlier agreement continued in force through 1918, but they probably were inoperative in 1919, although the formal agreement was to continue in operation until the proclamation of peace.

¹ The information in regard to the alkalis was obtained from the report of the alkali section of the War Industries Board to Mr. Baruch, in December, 1918; from the second annual report of the Chemical Alliance, January, 1919; and from the 1918 Yearbook of the Oil, Paint and Drug Reporter.

AGREEMENT OF NOVEMBER 19, 1917.

At a meeting on November 19, 1917, the manufacturers of aqua and anhydrous ammonia agreed to place the allocation of their output in the hands of the Food Administration.

They also agreed not to sell in excess of the following basic prices f. o. b. plants:

Anhydrous ammonia, 30 cents per pound carload lots.

Aqua ammonia, 8½ cents per pound carload lots.

Agreement entered into between Mr. Hoover and manufacturers of ammonia November, 1917:

(1) The manufacturer agrees that he will sell his output of anhydrous ammonia to such persons and in such amounts as may be directed by the United States Food Administration; that he will direct and require all of his agents to sell his product to such persons and in such amounts as may be directed by the United States Food Administrator. It is understood that until further notice from the United States Food Administrator the manufacturer may sell or use his product or accept orders for delivery thereof within 60 days from the date of such orders, without direction, limiting as far as possible the use and sale of such product for nonessential purposes. Contracts for deliveries extending over a longer period may be made only with special permission from the United States Food Administrator or his representative.

(2) The Food Administrator agrees that he will direct the distribution of the manufacturer's output in as economical and equitable a manner as possible, adhering as far as practicable to the expressed wishes of the manufacturer.

(3) The manufacturer agrees that he will sell all anhydrous ammonia at prices not to exceed those included in the schedule attached hereto marked "A," which is hereby incorporated in and made a part of this agreement. In case the cost of materials or manufacture or transportation increases or decreases such maximum prices shall be revised by the United States Food Administrator, on his own motion or on application of the manufacturer, in such manner that the profit of the manufacturer shall remain substantially the same as at the prices in said schedule.

(4) The aforesaid prices shall include all commissions paid to agents, but shall be exclusive of the prices of containers for which payment shall be required at time of payment for the contents, the actual amount so paid for containers to be refunded if returned in good order and in a reasonable time. In case of dispute said reasonable time shall be determined by the United States Food Administrator or his representative.

(5) In the event that the supply of sulphate of ammonia and ammonia liquor is insufficient to meet the needs of the manufacturers entering into this and similar agreements, it is agreed that the Food Administrator may allocate the supply of such materials among the manufacturers entering into this and similar agreements with the said Food Administrator on such fair and equitable basis as may be determined by said administrator.

(6) The manufacturer agrees that in order to carry out the purposes of this agreement he will furnish such reports as may be required by the United States Food Administrator or his representative upon request and upon such blanks as the United States Food Administrator may designate, giving complete information regarding transactions in anhydrous ammonia imported, manufactured, refined, packed, purchased, contracted for, received, sold, stored, shipped, or otherwise handled, distributed, or dealt with by the manufacturer, or on hand, in the possession or under the control of the manufacturer, and any other information pertinent thereto, concerning the business of the manufacturer that such representatives may require from time to time. It is understood and agreed that information thus furnished by the manufacturer shall not be divulged or made known in any manner by the United States Food Administrator or his representative, except in so far as necessary to carry out the purposes of this agreement or in so far as directed by a court of competent jurisdiction.

(7) This agreement shall remain in full force and effect from its date until peace shall have been proclaimed between the United States and Germany.

ANHYDROUS AMMONIA CONTAINING NOT LESS THAN 99.9 PER CENT NH₃.

State.	Cents per pound.	Remarks.
Alabama.....	33	If from Birmingham stock, 33 cents f. o. b. that point.
Arizona.....	40	
Arkansas.....	34	
California.....	35	If from San Francisco, Los Angeles, San Diego, Sacramento stocks, 35 cents f. o. b. these respective points.
Colorado.....	38	
Connecticut.....	31	
Delaware.....	31	
District of Columbia.....	31	
Florida.....	34	Jacksonville, 35 cents. If from Jacksonville stock, 33 cents f. o. b. that point.
Georgia.....	33	If from Atlanta and Savannah stocks, 33 cents f. o. b. that point.
Idaho.....	40	
Illinois.....	31	Chicago, Cook County, East St. Louis, 30 cents.
Indiana.....	31	Aetna, Calumet, East Chicago, Gary, Hammond, Indiana Harbor, and Whiting, 30 cents f. o. b. Chicago if shipped from that point. If from Indianapolis stock, 31 cents f. o. b. that point.
Iowa.....	32	Davenport and Dubuque, 31 cents.
Kansas.....	33	East of 96° longitude; 34 cents west of 96° longitude.
Kentucky.....	31	Covington and Newport, 30 cents. If from Louisville stock, 31 cents f. o. b. that point.
Louisiana.....	34	New Orleans, 33 cents. If from New Orleans stock, 33 cents f. o. b. that point.
Maine.....	31	
Maryland.....	31	If from Baltimore stock, 31 cents f. o. b. that point.
Massachusetts.....	31	
Michigan.....	32	Detroit, 31 cents. If from Detroit stock, 31 cents f. o. b. that point.
Minnesota.....	33	St. Paul and Minneapolis, 32 cents. If from St. Paul stock, 32 cents f. o. b. that point.
Mississippi.....	33	
Missouri.....	31	East of 93° longitude; 33 cents west of 93° longitude; St. Louis, 30 cents; Kansas City, 32 cents. If from Kansas City stock, 32 cents f. o. b. that point.
Montana.....	40	
Nebraska.....	34	Omaha, 33 cents. If from Omaha stock, 33 cents f. o. b. that point.
Nevada.....	42	
New Hampshire.....	31	
New Jersey.....	31	Camden, Newark, Paterson, and within 15 miles of New York City Hall, 30 cents.
New Mexico.....	38	
New York.....	31	Points within 15 miles of New York City Hall, 30 cents. If from Buffalo or Rochester stocks, 31 cents f. o. b. these respective points.
North Carolina.....	33	
North Dakota.....	35	
Ohio.....	31	Cincinnati, 30 cents. If from Cleveland or Toledo stocks, 31 cents f. o. b. these respective points.
Oklahoma.....	35	If from Oklahoma City stock, 35 cents f. o. b. that point.
Oregon.....	35	If from Portland stock, 35 cents f. o. b. that point.
Pennsylvania.....	31	Philadelphia, 30 cents. If from Pittsburgh stock, 31 cents f. o. b. that point.
Rhode Island.....	31	If from Providence stock, 31 cents f. o. b. that point.
South Carolina.....	33	
South Dakota.....	35	
Tennessee.....	33	Bristol and Memphis, 32 cents. If from Memphis stock, 32 cents f. o. b. that point.
Texas.....	35	East of 101° longitude; 37 cents west of 101° longitude. If from Houston, Fort Worth, Dallas, or San Antonio stocks, 35 cents per pound f. o. b. these respective points. If from El Paso stock, 37 cents f. o. b. that point.
Utah.....	40	If from Salt Lake City stock, 40 cents f. o. b. that point.
Vermont.....	31	
Virginia.....	32	Hampton, Newport News, Norfolk, Ocean View, Old Point Comfort, Phoebus, Portsmouth, Richmond, and Alexandria County, 31 cents. If from Norfolk or Richmond stocks, 31 cents f. o. b. these respective points.
Washington.....	35	If from Spokane stock, 35 cents f. o. b. that point.
West Virginia.....	32	
Wisconsin.....	32	Milwaukee, 31 cents. If from Milwaukee stock, 31 cents f. o. b. that point.
Wyoming.....	40	

Terms, 30 days net for both cylinders and contents.

Prices named above are freights free at common-carrier points unless otherwise stated; freight on empty cylinders returned for credit incumbent on seller in all cases.

Above prices apply to contents of 100 and 150 pound capacity cylinders. Charge 3 cents per pound higher for "small" or 50-pound capacity cylinders. Charge 6 cents per pound higher for "midget" or 25-pound capacity cylinders.

AQUA AMMONIA TECHNICAL, 26° B., 29.4 per cent—NH₃.

District No. 1.—Connecticut, Illinois, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, and Wisconsin; C. l. in drums, 8½ cents per pound, 26° B.; l. c. l. in drums, 8½ cents per pound, 26° B. Freight paid by shipper.

District No. 1a.—New Hampshire and Vermont: C. l. in drums, 8½ cents per pound, 26° B.; l. c. l. in drums, 8½ cents per pound, 26° B. Freight paid by shipper.

District No. 1b.—Maine, Virginia, and West Virginia, including District of Columbia: C. l. in drums, 8½ cents per pound, 26° B.; l. c. l. in drums, 9 cents per pound, 26° B. Freight paid by shipper.

District No. 2.—Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee: C. l. in drums, 9½ cents per pound, 26° B.; l. c. l. in drums, 9½ cents per pound, 26° B. Freight paid by shipper.

District No. 3.—Arizona, California, Colorado, Idaho, Indian Territory, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming: C. l. in drums, 8½ cents per pound, 26° B.; l. c. l. in drums, 8½ cents per pound, 26° B. Freight to Mississippi River points allowed by shipper.

Deduction of one-eighth cent per pound from above carload drum prices to be made when shipped in tank cars.

Aqua ammonia of all degrees, in carboys l. c. l., 2 cents per pound advance, and in carboys c. l., 1½ cents per pound advance. Freight incumbent upon buyer.

Deductions from any of above prices shall be made on the following degrees:

- 1½ cents per pound, 20° B.
- 2 cents per pound, 18° B.
- 2½ cents per pound, 16° B.
- 2½ cents per pound, 14° B.

AMMONIUM SULPHATE.

In the latter part of 1917 the War Department issued an order commandeering the output of ammonium sulphate. A price of 4½ cents bulk f. o. b. point of production was established for Government purchases, but very little of the output was actually commandeered. The order was canceled December 14, 1918.

The distribution, manufacture, and importation of ammonium sulphate were controlled through the license system, originating in the President's proclamation of January 3, 1918.

ARSENIC.

A presidential proclamation of November 15, 1917, provided for the licensing of dealers in white arsenic on or before November 20, 1917, and for the licensing of dealers in insecticides containing white arsenic on or before December 10, 1917. The administration of this control was placed with the Food Administration.

On February 28, 1918, the Food Administration announced a price to producers at 9 cents per pound in car lots f. o. b. plants, with an additional quarter cent for small quantities, the price to apply to deliveries anywhere in the United States. It was applicable to new contracts and did not affect existing contracts.

With the establishment of an increased margin to dealers on April 4, 1918, the market price rose to 9½ cents. The margins allowed varied from one-fourth cent per pound to 3 cents per pound, depending upon size of sales.

CASTOR BEANS AND CASTOR OIL.

In the summer of 1917 the Council of National Defense took the first steps in the control of the castor-oil industry.

"All available supplies have been purchased and will be turned over to the Government at the price paid for the oil and without compensation to the purchaser."¹

About this time arrangements were made to increase the acreage of castor beans in this country. The growing centers were organized as districts

¹ Oil, Paint, and Drug Reporter, Nov. 12, 1917.

and contracts were made with growers under a guarantee of \$3 per bushel of 46 pounds on contracts directly with the Government, and \$3.50 per bushel for beans grown by subcontractors. Beans were to be delivered hulled and sacked, in carload lots f. o. b. the nearest railroad station. The Government guaranteed to take the crop.¹

When the crop was harvested this price was raised to \$4.50 per bushel to the actual growers, while the contractors received a margin over and above this price.

The control over the price of imported castor beans and castor oil.—After the President's proclamation of February 14, 1918, giving power to the War Trade Board to restrict imports, effective February 16, 1918, all importers of castor beans and castor oil were required to give the United States Government a 10-day option to purchase all imported beans from Venezuela, Colombia, Central America, Mexico, and the West Indies, the price to be paid for such purchases being \$3.50 per bushel of 46 pounds, or \$0.076 per pound, duty paid, duty being \$0.008 per pound. The option on beans from all other countries was \$0.098 per pound, duty paid. These prices were to apply to all purchases at home and abroad after February 22, 1918, and for all shipments after June 10, 1918. This action was carried out by the Bureau of Imports of the War Trade Board at the request of and in conjunction with the Aircraft Production Board.

On June 16 the War Trade Board announced that outstanding licenses for the importation of castor beans and castor oil from the West Indies, Mexico, Central America, Colombia, and Venezuela were revoked as to ocean shipments after June 10, 1918. Thereafter no licenses from those countries would be issued, except when the United States Government was the consignee or where the importation was approved by the Bureau of Aircraft Production.

On June 23, 1918, the price of \$0.098 per pound, stipulated in the Government option, was lowered to \$0.076 per pound for all near-by countries. However, prices on beans from South America and the Orient remained at \$0.098 because of the high freight rates from those countries.

In October, 1918, the War Department announced an increase in the contract price of castor beans, making the price to growers \$0.098, duty paid, at all ports of entry, on beans originating in the West Indies, South America, Central America, and Mexico. This makes the price the same for all beans, domestic and imported.

Castor oil is being purchased at \$0.244 per pound for oil conforming to specification No. 3500-A of the Signal Corps, other oil at \$0.224 per pound.

When the armistice was signed the Government had on hand large quantities of castor oil. The Bureau of Aircraft Production negotiated with American crushers for the purchase of the Government stocks of domestic beans and oil. Somewhat earlier the War Industries Board had practically completed negotiations for the sale of these stocks on the basis of 25 cents per pound for the oil. The aircraft bureau officials, however, raised this price above 30 cents a pound.

All Government activities in castor beans and oil ceased in December, 1918.

¹ 1918 Year Book, Oil, Paint, and Drug Reporter.

² Official Bulletin, Oct. 22, 1918.

GLYCERIN.

On July 30, 1918, the Food Administration made the following announcement:

Prices at which dynamite glycerin is to be furnished to the allied Government and domestic consumers during the remainder of 1918 have been settled by joint agreement between the Food Administration and makers of soap and candles.

Allied requirements, estimated at 7,000 long tons, will be furnished at 60 cents a pound in August and September; 58 cents in October and November; and 56 cents in December, f. o. b. production points in drums—drums included in price—deliveries to be divided into quotas of approximately one-third for each of the three periods.

The same price was to be maintained as a minimum price for chemically pure glycerin, except that chemically pure glycerin could be sold on the usual terms of 1 per cent discount for cash in 10 days, or net 30 days, freight prepaid, drums extra and returnable at sellers' expense.

The agreement with the Allies for the last five months was carried out. About 1,000 tons were left undelivered at the time of the armistice, but satisfactory arrangements between the Allies and the American producers were made.¹

NITRATE OF SODA.

The purchase and importation of nitrate to the United States was controlled by the United States Government through the War Industries Board in cooperation with the importers formerly handling this material. The Government received their nitrate through the importers at cost, and the profit charged by the importers to private users was controlled by the Government so that uniform cost to all users was secured, this cost being based on the average monthly cost in Chile, plus the freight charge, exchange, and other elements of cost.

A committee known as the nitrate committee of the United States was established with offices in New York, and a New York representative of the War Industries Board represented that board in the offices of this committee.²

Uniform monthly prices were established, based upon the average cost in Chile during the particular month. To this average price was added a fixed charge of 2.5 per cent of landed costs in this country as a brokerage charge. Determination of the uniform price, as well as the control of the distribution of nitrate of soda, was in the hands of the nitrate committee. This arrangement was in force from the beginning of 1918. According to the best advices the quotations in this country up to the month of June were \$4.225 per hundredweight of 95 per cent nitrate and \$4.25 for the 96 per cent.

At the time of the armistice the Government had on hand surplus stocks of nitrate of soda. The War Department announced on March 10, 1919, that these stocks would be disposed of at the prevailing market prices.³

QUEBRACHO.

An agreement between importers of solid quebracho extract and the War Trade Board granting an option to the United States Government on all shipments during 1918 became effective May 6, 1918.

The maximum price agreed upon in the event of the exercise of such option was 6½ cents per pound, ex dock Atlantic seaports north of Cape Hatteras, basis 65 per cent tannin, net landed reweight, net cash basis \$20 ocean freight per ton of 2,240 pounds.

¹ Information from fats and oils section of the United States Food Administration.

² Statement of Mr. C. H. McDowell, director of the chemicals division of the War Industries Board, from Federal Trade Information Service, Dec. 24, 1918.

³ Federal Trade Information Service, Mar. 10, 1919.

On June 30, 1918, the War Trade Board announced a new ruling, placing tanning materials on the list of restricted imports.

Shipments of a limited quantity only of solid quebracho extract were allowed after July 10, 1918, and the fixed price became inactive after that date.

The War Trade Board lifted its ruling of June 30 on December 5, 1918.¹

SMOKELESS CANNON POWDER.

Beginning with February 13, 1918, all Army and Navy appropriation bills specify that "no part of any money appropriated in this act shall be expended for the purchase of powder, other than small arms, at a price in excess of 53 cents."

In other words, Congress controlled the price of cannon powder, but not of rifle powder.

SULPHUR.

Sulphur was one of the fertilizer materials included in the President's license proclamation of February 25, 1918.

On July 2, 1918, the President gave his approval to a resolution passed by the War Industries Board on June 27, 1918, in which the board assumed control of sulphur materials, controlling production and distribution. Commandeering orders were to be issued where necessary.²

Early in the fall of 1917 the fertilizer committee of the chemical alliance, acting with the consent of the Council of National Defense, arranged for a price of sulphur at \$22 per long ton f. o. b. mines. This policy was continued until June 7, 1918, when the War Industries Board took more direct control of the sulphur situation.³ The same price, however, continued effective through the life of the sulphur and pyrites section of the War Industries Board.⁴

TOLUOL.

The following resolution was passed by the committee on explosives and approved by the War Industries Board on January 29, 1918:

It is requested that the Ordnance Department of the Army, with the consent of the Navy, commandeer the entire toluol production of the country, and that a committee on toluol be appointed composed of representatives of the Army, the Navy, and the War Industries Board, said committee to be charged with the duty of recommending the development of further facilities for toluol and a distribution of all toluol produced.⁵

The price paid for the toluol which was so commandeered was \$1.50 per gallon. In June, 1918, this price was extended to cover all toluol released for nonmilitary purposes, at the following rates:⁶

	Per gallon.
Car lots in tank cars-----	\$1. 50
Any quantity in drums-----	1. 55

¹ War Trade Board Ruling 378.

² Minutes of War Industries Board, June 27, 1918.

³ Second Annual Report of the Chemical Alliance, January, 1919.

⁴ Letter of Apr. 8, 1919, from Mr. W. G. Woolfolk, head of the sulphur, pyrites, and alcohol section of the War Industries Board.

⁵ Minutes of the War Industries Board, Jan. 30, 1918.

⁶ The toluol section of the chemical division of the War Industries Board sent the following memorandum to the chief of the chemical section on Aug. 30, 1918: "We are advised by the board of appraisers, War Department, that an award of \$1.50 per gallon has been made on toluol taken under existing compulsory order. The award to run for duration of the order."

No release for shipment was granted where a price in excess of above is asked, and all releases other than for military purposes were stamped:

Released only upon condition that price does not exceed \$1.50 per gallon in tank cars; \$1.55 in drums.¹

WOOD CHEMICALS.

Under a commandeering order issued December 24, 1917, by the director of purchases, storage and traffic, through the wood chemicals section of the War Industries Board all wood chemicals were commandeered for a period of six months. The prices of acetate of lime, acetic anhydride, acetone, wood alcohol, ethyl methyl ketone, and methyl acetone were fixed at the same time; prices for acetic acid, formaldehyde and methyl acetate were announced in February, 1918.

On July 1, 1918, this commandeering order was reissued to continue until January 1, 1919. The same prices were awarded by the board of appraisers.

The order was canceled December 14, 1918.

WOOL GREASE.

The price-fixing committee has approved an agreement made by the producers of wool grease fixing a maximum price of 16 cents per pound packed in barrels f. o. b. shipping point this price to take effect September 17, 1918, expiring December 17, 1918, both dates inclusive, and covering all sales made both to the Government and to the public. This price applied to wool grease containing a moisture content not exceeding 3 per cent and any excess of moisture above 3 per cent called for a proportionately lower price. The guarantee of ash was limited to 2 per cent.

It was further agreed by the producers that all sales should be made subject to allocation by the "Tanning material and natural dye section" of the War Industries Board.

The prices were discontinued on the date of expiration.

¹ Metallurgical and Engineering Chemistry, June 1, 1918.

10. RUBBER.

The appended circular issued by the War Trade Board on April 30, 1918, indicates the origin and nature of the control over the prices of rubber and rubber substitutes.

On December 14 and 23, 1918, the War Trade Board discontinued the Government option price and removed the restrictions on imports.¹

CIRCULAR ISSUED BY WAR TRADE BOARD APRIL 30, 1918.

The importance of securing every possible ship for trans-Atlantic uses in connection with carrying on the war has now become paramount. With this in view, the quantity of various articles of commerce heretofore freely imported will be substantially limited until further notice. Among these commodities is crude rubber.

To the end that such limitation of imports shall not invite hoarding, speculative dealing, and profiteering, the War Trade Board has arranged that those dealing in this raw material and the manufacturers thereof will be governed by rules and regulations about to be promulgated by the War Trade Board to the entire rubber industry through the Rubber Association of America.

You are, therefore, hereby instructed on and after May 1, 1918, not to indorse any bills of lading for crude rubber or to accept any transfers or to release any crude rubber without securing from the transferees or the applicant for a release an option and a guaranty in substantially the following form:

OPTION AND GUARANTY CLAUSE TO BE INSERTED IN PRESENT RUBBER GUARANTY.

That the United States Government shall have, and it is hereby granted, an option to purchase at the prices and on the terms hereafter set forth all or any part of the crude rubber covered by this guaranty and also all other crude rubber now or hereafter owned or controlled by the undersigned until sold and delivered to a manufacturer.

In the event of the exercise of such option price to be paid for crude rubber and gums is fixed in accordance with the appended schedules.

That the undersigned will not sell, transfer, or deliver the rubber covered by the foregoing option, or any part thereof, to or for the benefit of any person at a price greater than the prices set forth in the foregoing option, except such rubber as he may be under contractual obligation to deliver under a contract executed and in force prior to May 1, 1918.

Copies of such contracts, sworn to as being correct, must be filed with the War Trade Board within five days from this date. Any deliveries made under such contracts to manufacturers subsequent to the date on which import restrictions and a plan for the allocation of crude rubber shall be made effective shall constitute a portion of the amount allocated to such manufacturers under such plan.

PRICES EFFECTIVE MAY 1, 1918.

	Per pound.
Para, upriver fine-----	\$0. 68
Plantation:	
First latex crêpe-----	. 63
Smoked sheets, standard quality-----	. 62

PRICES EFFECTIVE MAY 14, 1918.

Plantation qualities:	
Off standard latex crêpe-----	. 62
Off color latex-----	. 61
No. 1 amber crêpe-----	. 60
No. 2 amber crêpe-----	. 60

¹ War Trade Board Rulings 414, 456.

	Per pound
Plantation qualities—Continued.	
No. 3 amber crêpe (medium color)-----	\$0. 58
No. 4 amber crêpe (darkish color)-----	. 57
Prime, clean, light-brown crêpe, thick and/or thin-----	. 60
Medium color brown, clean crêpe, thick and/or thin-----	. 58
Good dark-brown crêpe, thick and/or thin-----	. 54
Specky brown crêpe, thick and/or thin-----	. 50
Massed or rolled crêpe-----	. 44
Colombo scrap No. 1 quality-----	. 46
Colombo scrap No. 2 quality-----	. 44
Standard quality smooth smoked sheets-----	¹ . 60
Standard quality unsmoked sheets-----	² . 61
Mexican guayule:	
Guayule crude, with 20 per cent guaranty of shrinkage-----	. 35
Clean, dry, and treated guayule, such as Duro, Triangle, Box, Torreon, and Alto brands-----	. 48
Para grades:	
Upriver medium-----	. 63
Manaos weak fine-----	. 56
Upriver coarse-----	. 40
Upper Caucho ball-----	. 40
Xingu ball-----	. 38
Lower Caucho ball-----	. 36
Islands fine-----	. 59
Islands coarse-----	. 27
Cameta-----	. 28
Central American grades:	
Central scrap—	
Esmeralda-----	. 39
Corinto-----	. 39
Mexican-----	. 39
Bluefield-----	. 39
Central slab—	
Guatemala-----	. 32
Colombian-----	. 32
Mexican, and others of similar nature-----	. 32
African grades:	
Red Congo ball-----	. 48
Black Congo—	
Kassai-----	. 50
Lopori-----	. 50
Equateur-----	. 50
Sangha and similar grades-----	. 50
Benguellas, 82½ per cent shrinkage-----	. 29
Benguellas, 28 per cent shrinkage-----	. 33
Niger paste and flake-----	. 28
Red Kassai nuggets, cords, and similar grades-----	. 42
Massais-----	. 53
Rio Nunez-----	. 53
Miscellaneous:	
Mattogrosso fine-----	. 53
Mattogrosso coarse-----	. 38
Penang (this includes Java)-----	. 37
Caucho tails-----	. 35
Gutta Joolatong (Pontianac):	
Palambang-----	. 16
Banjermassin-----	. 15
Sarawak-----	. 14
Pressed Gutta Joolatong, having approximately 40 per cent of shrinkage loss-----	. 25
Gutta Siak -----	³ . 28
Balata:	
Prime suriname amber sheet-----	. 97
Fair average sheet-----	. 95
Venezuela block-----	. 71
Colombian block-----	. 61
Panama block-----	. 59
Other grades of Balata at their relative value.	
Gutta-percha:	
Red Macassan-----	3. 00
Other grades at their relative value.	

PRICES EFFECTIVE MAY 29, 1918.

Manicoba (on the basis of 80 per cent loss in washing and drying)-----	. 36½
(Lower qualities to be priced in accordance, so that they shall not cost the manufacturer over 52 cents per pound dry weight.)	
Mollendo fine-----	. 60
Tapajos-----	. 61
Xingu fine-----	. 63
Peruvian weak fine-----	. 55
Lower Amazon weak fine-----	. 45

PRICES EFFECTIVE JUNE 13, 1918.

Knapsack Madeira fine Para-----	. 73
Madeira fine Para-----	. 69

¹ Revised May 29 to 61 cents.² Revised May 29 to 60 cents.³ In bond.

PRICES EFFECTIVE JULY 2, 1918.

Africans :	Per pound.
Accra (Gold Coast) lumps.....	\$0. 28
Lagos lumps.....	. 28
Lump flake.....	. 28
Conakry niggers.....	. 55
Prime Mozambique ball.....	. 52
Sierra Leone niggers.....	. 50
Hausa ball.....	. 35
Hausa cake.....	. 35
Cameroon ball and similar grades.....	. 35
Gambia niggers.....	. 45
Prime Madagascar qualities (on the basis of 35 per cent shrinkage).....	. 35
Madagascar niggers (on the basis of 45 per cent shrinkage).....	. 29
Assam and Rambong :	
Prime crêpes.....	. 60
Good quality crêpes.....	. 58
Assam onions.....	. 54

PRICES EFFECTIVE JULY 6, 1918.

Para, fine :	
Peruvian.....	. 67
Cut Angostura.....	. 64
Para, medium :	
Peruvian.....	. 62
Cut Angostura.....	. 58
Coarse, medium.....	. 45
Para, coarse :	
Peruvian.....	. 37
Mollendo.....	. 37
Rio Negro coarse.....	. 38
Rio Negro strings.....	. 35
Nugget coarse.....	. 46
Angostura coarse.....	. 37
Tapajos coarse.....	. 38
Xingu coarse.....	. 38
Ceara coarse (Negroheads).....	. 38
Miscellaneous :	
Ceara scrap 1.....	. 37
Pernambuco sheet.....	. 35
Mangabeira sheet.....	. 35
Upper Caucho slab.....	. 33

All of the above prices are on the basis of c. i. f. New York.

11. NEWS-PRINT PAPER.

Pursuant to a resolution of the United States Senate, dated April 24, 1916, the Federal Trade Commission undertook an investigation of the news-print paper industry of the United States. In February, 1917, certain manufacturers requested the Federal Trade Commission to fix "a fair and reasonable price for the sale of such paper for use in the United States" in the period from March 1, 1917, to September 1, 1917. Such a price was fixed by the commission on March 3, 1917. After this agreement was adopted a Federal grand jury for the southern district of New York found indictments against four of the signatories to the agreement for violations of the Sherman antitrust law. The agreement soon collapsed. On November 26, 1917, a new agreement was made between Thomas W. Gregory, Attorney General of the United States, as trustee, and certain persons and corporations engaged in the manufacture and sale of news-print paper.

The substance of this agreement and the subsequent action of the Federal Trade Commission are given in the statement below issued by the commission on June 18, 1918.

The prices announced upon the different dates of agreement are here arranged in tabular form.

Commodity.	Agency fixing price.	Date or period.	Price fixed (f.o.b. mill).
<i>Paper, news-print.</i>			<i>Per cwt.</i>
Roll news in car lots.....	Federal Trade Commission.	Apr. 1, 1918; set originally for duration of the war and 3 months thereafter.	\$3.10
Roll news in less than car lots.....			3.22½
Sheet news in car lots.....			3.50
Sheet news in less than car lots.....	Arbitration decision on Sept. 25, 1918, by United States circuit court, second circuit.	Apr. 1, 1918; for duration of the war and 3 months thereafter.	3.62½
Roll news in car lots.....			3.50
Roll news in less than car lots.....			3.62½
Sheet news in car lots.....	Federal Trade Commission; prices revised Oct. 18, 1918.	Revised prices allowing for wage increase became effective May 1, 1918.	3.90
Sheet news in less than car lots.....			4.02½
Roll news in car lots.....			3.63½
Roll news in less than car lots.....	.....do.....	Revised prices allowing for freight increase became effective July 1, 1918.	3.75½
Sheet news in car lots.....			4.03½
Sheet news in less than car lots.....			4.15½
Roll news in car lots.....			3.75½
Roll news in less than car lots.....			2.87½
Sheet news in car lots.....			4.15½
Sheet news in less than car lots.....			4.27½

FINDINGS OF THE FEDERAL TRADE COMMISSION OF PRICES AND TERMS OF CONTRACT AND SALES OF NEWS-PRINT PAPER UNDER AGREEMENT DATED NOVEMBER 26, 1917.

The Federal Trade Commission has had before it as a reference the agreement made on November 26, 1917, between Thomas W. Gregory, the Attorney General of the United States, as trustee, and certain persons and corporations engaged in the manufacture and sale of news-print paper.

The manufacturers, parties to this agreement, comprise three United States companies and seven Canadian companies, as follows: United States companies—International Paper Co., Minnesota & Ontario Power Co., Gould Paper Co. Canadian companies—Spanish River Pulp & Paper Mills (Ltd.), Abitibi Power & Paper Co. (Ltd.), Laurentide Co. (Ltd.), Belgo-Canadian Pulp & Paper Co. (Ltd.), Price Bros. & Co. (Ltd.), Donnacona Paper Co. (Ltd.), Brompton Pulp & Paper Co. (Ltd.).

Those 10 companies produced in 1917 about 950,000 tons of news-print paper, or nearly 50 per cent of the total output of all mills on the North American Continent. The bulk of this tonnage was consumed by newspaper publishers in the United States.

The agreement provides, briefly, that the Federal Trade Commission shall fix the maximum prices and terms of sale of the output of the news-print paper of these 10 companies sold to purchasers in the United States for the duration of the war and three months thereafter. In the case of the Minnesota & Ontario Power Co. and its subsidiary, the Fort Frances Pulp & Paper Co. (Ltd.), the agreement provides that the prices shall be fixed as of January 1, 1918. The commission is also directed to determine the just and reasonable maximum prices and terms of resale of all paper merchants, sales agents, or other middlemen selling the product of these 10 companies to customers in the United States.

All parties at interest were invited to lay before the commission any pertinent data, and counsel were diligent and helpful to the commission in securing a complete knowledge of the circumstances surrounding production and distribution. Extensive hearings were held and a mass of evidence taken.

Cost figures were drawn from books of original entry and the vouchers and accounts of the several manufacturers were scrutinized by expert accountants. Complete appraisals of various plants were also presented.

Newsprint prices.—The commission has heard the evidence and examined the data presented to it and finds the following maximum prices as of April 1, 1918, to be fair and reasonable for each of the 10 signatory companies for sales of standard newsprint paper to customers in the United States:

Roll news in car lots, \$3.10 per 100 pounds f. o. b. mill.

Roll news in less than car lots, \$3.22½ per 100 pounds f. o. b. mill.

Sheet news in car lots, \$3.50 per 100 pounds f. o. b. mill.

Sheet news in less than car lots, \$3.62½ per 100 pounds f. o. b. mill.

The cost of the Brompton Pulp & Paper Co. (Ltd.), which is an incomplete mill of small newsprint tonnage and which buys its sulphite, was not allowed to control in the determination of the above prices.

The Minnesota & Ontario Power Co. is directed to adjust its settlements for the months of January, February, and March, 1918, on a basis of 10 cents per 100 pounds above these maximum prices, thereafter the said maximum prices shall apply.

Terms of sale.—The commission directs that the so-called standard form of contract be used at this time, with changes in terms that shall provide: (a) A definite tonnage specification and passage of full and unrestricted title to the customer upon delivery, and (b) that the signatory manufacturers shall credit customers for overweight above the 32-pound basis, computed by taking the annual average of the total tonnage delivered on contract, provided that the customer gives such prompt notice as to overweights from time to time as will enable the manufacturer, if he desires, to verify the claims currently and to make correction in weights of subsequent deliveries.

Certain other changes in the terms of contract urged by the publishers contain merit, but this does not appear to be a proper time for introducing avoidable changes.

Jobbers' prices and terms of resale.—The maximum commissions for jobbers or other middlemen selling newsprint obtained from any of the signatory manufacturers to customers in the United States shall be 15 cents per 100 pounds on carload lots, 40 cents per 100 pounds on less than car lots, and 60 cents per 100 pounds on less than ton lots.

The commissions shall be added to the actual cost of paper at the mill or at the warehouse. The cost at the warehouse will be the net mill price plus freight, cartage, and other reasonable necessary expenses incurred in getting the paper to the warehouse. In billing customers these items and the commission shall be stated separately.

SEPTEMBER 25, 1918.

The findings and award of the Federal Trade Commission concerning prices and terms of contract and sale of news-print paper, as announced June 18, 1918, were appealed for review to the United States circuit court.

The decision of this court, as issued on September 25, 1918, is given in the following statement.

FINDINGS AND CONCLUSIONS OF THE JUDGES OF THE CIRCUIT COURT IN THE
NEWS-PRINT CASE.

FINDINGS.

1. Our jurisdiction rests solely on the consent of the signatory parties; we act as arbitrators only.

2. The principles applied by courts of authority in regulating rates for public utilities should be followed in this proceeding as nearly as possible.

3. In valuing the capital investment used in producing news print, prices before the present European War should be adopted.

4. We are not informed as to the investment or value of the plant of the Gould Paper Co. The Brompton Co. produces little news print, and that under abnormal conditions. Therefore, these manufacturers must conform to the fair maximum price fixed for the other eight parties and based upon the evidence concerning said eight businesses.

5. In ascertaining capital investment, i. e., the present value of property actually used in paper production, we exclude timber lands whether owned or leased, also undeveloped or potential water power, i. e., water rights; but include mill and town sites, terminal facilities, and improvements on or development of natural water powers, together with any investment by way of actual payment for power rights. The foregoing allowed elements of capital value are the "tangibles."

6. Going concern value and working capital are proper additions to "tangibles."

7. In ascertaining manufacturing cost, no allowance for stumpage in respect of wood obtained from leased Canadian Crown lands is made, such stumpage not representing any actual disbursement, nor the partial exhaustion of property for which payment (on stumpage basis) was ever made.

In respect, however, of wood cut in owned lands, such stumpage charge is proper, and \$2 per cord is less than the market rate.

8. Owing to more costly wood and higher expenses for labor, taxes, and freight charges, the typical mill in the United States can not, with equal skill in management, produce paper as cheaply as a similar mill in Canada; such disadvantage means an additional cost per ton of paper of slightly more than \$5.

9. The Spanish River Co. is an exception to the Canadian manufacturers solely because of a high and wholly unexplained wood cost.

10. The maximum selling price fixed for all the signatories should be based on an average of the reasonable capital investments, and fair manufacturing costs of the signatory parties, other than the Gould & Brompton Cos.

11. It is not advisable to make any special rate by way of favor for manufacturers meeting with special but temporary misfortune. The high manufacturing cost of The Minnesota & Ontario Co., due to drought, and the serious loss of the Abitibi Co., ascribed to sabotage, are business accidents which would not relieve them from the competition of more fortunate rivals in ordinary times, and under a fixed maximum rate they must still meet competition.

12. We consider ourselves bound by agreement of parties that the annual production of each manufacturer is to be taken as the proven daily capacity of plant multiplied by 300 yearly working days. Therefore, we disregard the fact also proven that the output of the signatory parties for 1917 was 5.6 per cent over the assumed production.

13. The fair present value, as depreciated and at prewar prices of an integrated paper-mill plant, per ton of daily capacity, is:

Tangibles	\$25,000
Going concern value, 10 per cent.....	2,500
Working capital.....	12,000
Total	39,500

14. A fair maximum return on said capital in a business of the hazards proven is 15 per cent per annum.

15. The actual cost of making 1 ton of news-print paper in an average Canadian mill, out of recently gathered wood and without any allowance for stumpage not actually paid, was not less than \$48, on or about April 1, 1918. There is no evidence or suggestion that any element of cost has since then

diminished. The same ton of paper would have cost, if made in the United States, about \$5 more; and the average cost for the eight manufacturers considered is more than \$50 per ton.

CONCLUSION.

Applying the foregoing findings to a plant having daily capacity of 100 tons:

The capital invested is $\$39,500 \times 100$	\$3, 950, 000
The fair annual return, 15 per cent.....	592, 500
<hr/>	
To be obtained by selling all of an annual production of 30,000 tons, or a profit per ton of.....	19. 75
Add to this average cost of manufacture, say.....	50. 25
<hr/>	
And.....	70. 00

should be the maximum selling price of 1 ton of news print in rolls f. o. b. mill,

It is therefore ordered that the finding or award of the Federal Trade Commission be varied so as to read as follows:

The fair and reasonable maximum prices for each of the 10 signatory companies for sales of standard news-print paper to customers in the United States are:

	Per cwt.
Roll news in car lots.....	\$3. 50
Roll news in less than car lots.....	3. 62½
Sheet news in car lots.....	3. 90
Sheet news in less than car lots.....	4. 02½

All prices are f. o. b. mill.

The Minnesota & Ontario Co. is directed to adjust its outstanding settlements for the months of January, February, and March, 1918, at not over the maximum hereby fixed.

In no other respect does this vary from the award of the Federal Trade Commission.

OCTOBER 18, 1918.

Following the announcement of the decision of the United States Circuit Court, on September 25, 1918, in regard to the award of the Federal Trade Commission concerning prices for sales of standard news-print paper in the United States, the commission issued supplemental findings on October 18, 1918.

Those findings and the subsequent action based upon them are given below.

SUPPLEMENTAL FINDINGS OF THE FEDERAL TRADE COMMISSION.

Subsequent to the finding and award of the members of the Federal Trade Commission acting as arbitrators in the above proceedings, which finding and award was made June 18, 1918, the said award was appealed for review to Hon. H. G. Ward, Hon. Henry W. Rogers, Hon. Charles M. Hough, and Hon. Martin T. Manton, judges of the United States Circuit Court for the Second Circuit, acting as reviewing arbitrators.

On September 25, 1918, the reviewing arbitrators ordered that the finding or award of the Federal Trade Commission be varied so as to read as follows:

The fair and reasonable maximum prices for each of the 10 signatory companies for sales of standard news-print paper to customers in the United States are:

	Per cwt.
Roll news in car lots.....	\$3. 50
Roll news in less than car lots.....	3. 62½
Sheet news in car lots.....	3. 90
Sheet news in less than car lots.....	4. 02½

All prices are f. o. b. mill.

Accordingly the Federal Trade Commission hereby directs that its findings be varied as above set forth, to be effective as of April 1, 1918, for all the signatory companies, and in the case of the Minnesota & Ontario Power Co. to be effective as of January 1, 1918.

FINDINGS AS TO COST INCREASES.

Subsequent to the finding and award of the members of the Federal Trade Commission as arbitrators, dated June 18, 1918, there were submitted to the commissioners by one of the parties hereto certain claims as to the effect of changes in rates of wages, freight rates, and wood costs since April 1, 1918. These changes cover the period from April 1 up to and including the date of the supplemental hearing, which was July 29 and 30, 1918.

The figures presented have been analyzed and checked by the commission's accountants, and the accountants' report has been put in evidence by stipulation of parties.

It appears from this stipulation that there have been increases in the cost of production of news print chargeable to these three factors, as follows:

	Per ton.	Per hundredweight.
(1) Wood cost increase (since Apr. 1, 1918).....	\$3.75	\$0.187
(2) Wage increase (since May 1, 1918).....	2.65	.13½
(3) Freight increase (since July 1, 1918).....	2.41	.12

WOOD COST INCREASES.

As noted above, the accountants' report shows an increase in wood cost for the International Paper Co., amounting to \$3.75 per ton of paper. In arriving at the base price of \$3.10 per hundred pounds, effective April 1, 1918, the commission took into account an increase in cost of \$2.50 per ton of paper since the International Paper Co. and the Minnesota & Ontario Power Co. were practically on a new wood basis after April 1.

In calculating the base price of \$3.50 per hundred pounds, the reviewing arbitrators also apparently took into consideration the factor of increased wood cost. They say in paragraph 15:

"The actual cost of making 1 ton of news-print paper in an average Canadian mill, out of recently gathered wood and without any allowance for stumpage not actually paid, was not less than \$48 on or about April 1, 1918."

No wood has been gathered since that date, wherefore the increased wood cost is taken to be included in the reviewing arbitrators' calculations.

The commission, therefore, finds that no increase in price is to be made as a result of claimed increases in wood costs.

INCREASE IN WAGES.

The commission finds that, since May 1, 1918, there has been an increased labor cost of \$2.65 per ton, or 13½ cents per hundred pounds, and it appears to be bound to add this amount to the selling prices as varied by order of the reviewing arbitrators.

The commission, therefore, finds and orders that adjustments since May 1, 1918, between parties hereto, shall be made on the following basis:

	Per cwt.
Roll news in car lots.....	\$3.63½
Roll news in less than car lots.....	3.75½
Sheet news in car lots.....	4.03½
Sheet news in less than car lots.....	4.15½

All prices are f. o. b. mill.

INCREASE IN FREIGHT.

The commission finds that an increase in freight rates went into effect June 25, 1918, that said increase adds \$2.41 per ton, or 12 cents per hundred pounds, and that such increase became operative as to the signatory companies on July 1, 1918; and it appears to be also bound to add this amount to the selling prices as varied by order of the reviewing arbitrators.

The commission, therefore, finds and orders that adjustments since July 1, 1918, between parties hereto, shall be made on the following basis :

	Per hundredweight.
Roll news in car lots.....	\$3. 75½
Roll news in less than car lots.....	3. 87½
Sheet news in car lots.....	4. 15½
Sheet news in less than car lots.....	4. 27½

All prices are f. o. b. mill.

PROFIT BASIS FOR NEWSPRINT PAPER.

In making their award the reviewing arbitrators calculated a net average profit of \$19.75 per ton as a fair and reasonable profit.

It has been shown (Federal Trade Commission Report on the Newsprint Paper Industry, June 13, 1917, p. 105, and included in the evidence in this case) that the prewar average profit per ton for the manufacture and sale of newsprint paper for United States and Canadian mills was as follows (figures for signatory manufacturers are added for comparison) :

Year.	United States mills.	Inter-national Paper Co. and Minne-sota and Ontario Co.	Canadian mills.	Six Canadian signatories.	United States and Canadian combined.	Eight signatory companies combined. ¹
1913.....	\$5. 53	\$5. 13	\$6. 45	\$4. 98	\$5. 70	\$5. 09
1914.....	4. 94	5. 55	6. 62	5. 71	5. 35	5. 61
1915.....	5. 59	6. 37	8. 13	6. 82	6. 34	6. 55
1916 (first half).....	6. 75	6. 99	9. 54	8. 15	7. 55	7. 40

¹ Brompton and Gould not included.

It is fair to presume that, on the average, capital has been invested in the manufacture of newsprint paper on an expectation of a net average profit of not more than \$10 per ton.

The increases in cost of wood, freight, and labor shown above are found to be the result of war conditions and to be unavoidable by either party.

It has been established by governmental price-fixing authorities that during the war in case of unusual cost increase caused by war conditions and working a hardship, such increase should be equitably distributed and not passed on in toto to the purchaser.

Were the commission free to express its judgment in a finding at this time it would hold that the net average profit of \$19.75 was ample to absorb all increases in wood costs, labor costs, and freight charges up to the present time, in which case the result might be stated thus :

	Per ton.	Per hundred-weight.
Under the price fixed by the reviewing arbitrators there is a net average profit per ton, including increased wood costs, of.....	\$19. 75	\$0. 987
Increased labor cost from May 1, 1918.....	\$2. 65	
Increased freight cost from July 1, 1918.....	2. 41	
	5. 06	. 25
Average net profit after absorbing increased cost.....	14. 69	. 73
Highest average, 8 signatory companies (first half 1916).....	7. 46	. 37
Increased net profit under award.....	7. 23	. 36

Feeling itself bound, however, by the order of the reviewing arbitrtors, the commission finds selling prices for the three periods, April 1, 1918, May 1, 1918, and July 1, 1918, as above set forth and orders that adjustments between parties be made, as of such dates, accordingly.

In all other particulars the findings of the commission of June 18, 1918, are affirmed.

BIBLIOGRAPHY.

There follows a brief bibliography of selected periodical references to Government price control in the United States during the war. The Official Bulletin, published by the Government, and the Commercial and Financial Chronicle give especially comprehensive statements of the formal controls as they were adopted. The New York Public Library and the Congressional Library at Washington, at the request of those interested in this inquiry, have each prepared for distribution a much fuller bibliography on this subject than can here be printed.

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Rushing into dictatorships. Mar. 3, 1917, v. 104: 796-7.

The food situation—Statutes no panacea. Mar. 10, 1917, v. 104: 897.

Fears of Government regulation. Editorial. Apr. 14, 1917, v. 104: 1420.

One way of rendering service to the country—The food question. Apr. 14, 1917, v. 104: 1432.

Secretary of the Navy reduces prices of torpedoes from E. W. Bliss Co. Apr. 21, 1917, v. 104: 1554.

Herbert C. Hoover to handle Nation's food problems. Apr. 21, 1917, v. 104: 1555.

Danger of Government control. Editorial. May 5, 1917, v. 104: 1730.

Patriotism to and by Government. May 26, 1917, v. 104: 2051-2053.

E. H. Gary on principles for which we are fighting. May 26, 1917, v. 104: 2067.

Regulating prices—The low supply and demand. June 16, 1917, v. 104: 2382-2385.

Food control—The latest dictatorship bill. June 16, 1917, v. 104: 2385.

The food control bill. June 30, 1917, v. 104: 2592.

President's warning against high prices. July 14, 1917, v. 105: 135.

The resort to commissions and what it means. July 21, 1917, v. 105: 218.

The food control bill enacted. Aug. 11, 1917, v. 105: 540.

The Food Administration—Its purposes and plans. Aug. 18, 1917, v. 105: 664.

Federal control of wheat and flour. Aug. 18, 1917, v. 105: 665.

What the New War Industries Board may accomplish. Aug. 18, 1917, v. 105: 667.

Has Congress power to create a dictator? Aug. 25, 1917, v. 105: 749-51.

Fixing prices of food and fuel. Sept. 1, 1917, v. 105: 850-52.

Labor strikes, price fixing, and the war. Sept. 22, 1917, v. 105: 1140-42.

The retailer and Government price control. Nov. 3, 1917, v. 105: 1745.

Business as usual—What does it mean? Nov. 10, 1917, v. 105: 1834-36.

L. E. Pierson on obligations of Government and business in the war. Nov. 17, 1917, v. 105: 1941.

United States Chamber of Commerce on progress of Government price control. Dec. 1, 1917, v. 105: 2144.

Foreign trade council urges coordination of price fixing and taxation. Dec. 1, 1917, v. 105: 2147.

Our experiments in "Government control." Jan. 19, 1918, v. 106: 218.

Proposed Government control of security issues. Jan. 19, 1918, v. 106: 235.

Congress, the President, and the "War Council." Jan. 26, 1918, v. 106: 325.

Impending price-fixing bill. Editorial. Feb. 2, 1918, v. 106: 418.

Executive order regulating control of foreign exchange by Federal Reserve Board. Feb. 2, 1918, v. 106: 438.

Discussion of Government control. Editorial. Feb. 9, 1918, v. 106: 524.

No general price fixing on agricultural products. Mar. 2, 1918, v. 106: 876.

Senator Lodge in criticism of Fuel Administration and price fixing of Government. Mar. 2, 1918, v. 106: 880.

Committee to pass on prices for basic raw materials for Government. Mar. 23, 1918, v. 106: 1187.

Retrospect of 1917. Mar. 30, 1918, v. 106: 1280-86.

Is there a legal limit to price control? April 6, 1918, v. 106: 1394.

Requirements division of War Industries Board to carry out policies of B. M. Baruch. Apr. 13, 1918, v. 106: 1524.

Charles H. Sabin on Government price regulation. May 25, 1918, v. 106: 2169.

What is profiteering and who are the profiteers? June 8, 1918, v. 106: 2376.

Retrospect of 1917. June 29, 1918, v. 106: 2693.

How business runs the Government. Aug. 17, 1918, v. 107: 635.

Our apathetic acceptance of control and operation. Aug. 31, 1918, v. 107: 837.

Proposed Government control of retail dry goods. Oct. 12, 1918, v. 107: 1439.

Judge Gary's view as to readjustment period. Nov. 16, 1918, v. 107: 1884.

Reconstruction and resumption. Release from Government control. Nov. 23, 1918, v. 107: 1951.

Fixed prices discontinued. Dec. 7, 1918, v. 107: 2148.

A proposal for the governmental fixing of retail prices. Dec. 14, 1918, v. 107: 2221.

Chas. E. Hughes sees greater efficiency in private than Government control. Dec. 14, 1918, v. 107: 2236.

ACIDS.

Sulphuric and nitric acid prices. June 29, 1918, v. 106:2712.

ALCOHOL.

Wood alcohol output taken by Government. Dec. 22, 1917, v. 105:2411.

ALUMINUM.

Rejection of aluminum price recommended by Council of Defense. July 7, 1917, v. 105:22.

Aluminum prices approved by the President. Mar. 9, 1918, v. 106:983.

New aluminum prices approved. June 1, 1918, v. 106:2294.

Aluminum prices continued. Aug. 24, 1918, v. 107:759.

ARSENIC.

Fixing of arsenic prices by United States Government. June 1, 1918, v.

BINDER TWINE.

Control of binder twine output by Government. Jan. 12, 1918, v. 106:142.

Scale of prices announced by Food Administration. Mar. 2, 1918, v. 106:879.

CASTOR-OIL BEANS.

Price of \$4.50 per bushel fixed. Nov. 2, 1918, v. 107:1714.

CEMENT.

Cement price fixing by the Government. May 25, 1918, v. 106:2183.

COPPER.

Copper producers' offer to the Government. Mar. 24, 1917, v. 104:1108.

Government order for copper at a fixed price. June 30, 1917, v. 104:2603.

Government lowers price of copper. July 14, 1917, v. 105:133.

Government fixed price. Sept. 22, 1917, v. 105:1165.

Attitude of copper trade toward Government's price. Sept. 29, 1917, v. 105:1264.

Conference of copper interests with Government officials. May 4, 1918, v. 106:1856.

Government's price continuing. Wall Street comment. May 25, 1918, v. 106:2182.

Increase in copper price by War Industries Board. July 6, 1918, v. 107:35.

Copper to remain at 26 cents. Comment. Aug. 10, 1918, v. 107:562.

Copper price continued. Comment. Nov. 2, 1918, v. 107:1715.

Copper price continued. Nov. 23, 1918, v. 107:1967.

COTTON.

A suggestion that the Government contract ahead for the growing cotton crop. June 30, 1917, v. 104:2593.

Denial of cotton price-fixing movement. Feb. 9, 1918, v. 106:553.

War Trade Board's announcement concerning cotton shipments to Spain. Apr. 13, 1918, v. 106:1524.

Conference looking to stabilization of cotton industry. Apr. 13, 1918, v. 106:1528.

Bill fixing price of raw cotton at 20 cents. Apr. 20, 1918, v. 106:1627.

Cotton manufacturers' resolutions on price fixing, coal priority, etc. May 11, 1918, v. 106:1961.

Tentative plan for price fixing of cotton goods. June 15, 1918, v. 106:2506.

Government plans concerning cotton price fixing. June 29, 1918, v. 106:2708.

Beverly D. Harris on stabilization of cotton prices. July 13, 1918, v. 107:130.

Proposed fixing of cotton price. Sept. 7, 1918, v. 107:949.

Developments growing out of reports of cotton price fixing. Sept. 21, 1918, v. 107:1150; Sept. 28, 1918, v. 107:1250; Oct. 12, 1918, v. 107:1438.

Cotton price fixing unnecessary. Nov. 9, 1918, v. 107:1788.

Cotton goods prices continued. Nov. 23, 1918, v. 107:1964.

Cotton price fixing to cease Jan. 1. Dec. 14, 1918, v. 107:2238.

COTTON LINTERS.

Questionnaire on cotton linters issued by War Industries Board. June 1, 1918, v. 106:2289.

COTTONSEED.

Regulations to prevent hoarding and speculation in cottonseed. Nov. 10, 1917, v. 105:1853.

Rules for cottonseed buyers and sellers. Aug. 10, 1918, v. 107:562-3.

Prevailing price of cottonseed held to be too low by Texas commissioner. Aug. 24, 1918, v. 107:755.

Price stabilization of cottonseed. Sept. 21, 1918, v. 107:1151.

Speculation in cottonseed. Nov. 10, 1917, v. 105:1853.

FERTILIZERS.

Proclamation licensing fertilizer industry. Mar. 2, 1918, v. 106:880.

Food.

GENERAL.

The food riots and measures of relief. Feb. 24, 1917, v. 104:699.

The food shortage—the seat of the disease. Mar. 3, 1917, v. 104:796-7.

J. Ogden Armour urges Government control of food. Apr. 14, 1917, v. 104:1447-8.

The food problem and the farmer—normal methods best. Apr. 21, 1917, v. 104:1536-7.

Secretary Houston would fix food prices. Apr. 21, 1917, v. 104:1556.

Herbert C. Hoover appointed Food Administrator. May 26, 1917, v. 104:2072.

The administration's food-control bills. June 9, 1917, v. 104:2298-9.

Herbert C. Hoover outlines Food Administration program. June 9, 1917, v. 104:2301-2.

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New York Legislature in session to consider food bill. Aug. 4, 1917, v. 105:452-3.

Text of food-control bill. Aug. 11, 1917, v. 105:556-7-8.

Text of food-survey bill. Aug. 11, 1917, v. 105:559.

Food control launched. Aug. 18, 1917, v. 105:646-7.

Federal control of food to begin Nov. 1. Oct. 13, 1917, v. 105:1472.

The President defines fair profit for foodstuffs as normal average obtained prior to July, 1914. Dec. 8, 1917, v. 105:2231.

Review of course of food prices by Mr. Hoover. Nov. 16, 1918, v. 107:1878-9.

BAKING INDUSTRY.

Government regulation of baking industry. Nov. 17, 1917, v. 105:1944-46.

Food Administration's announcement regarding baking rules under new license regulations. Feb. 9, 1918, v. 106:549.

CANNERS.

Maximum margins allowed canners. Apr. 27, 1918, v. 106:1747.

COFFEE.

Licensing of green-coffee dealers to prevent outside speculation. Feb. 9, 1918, v. 106:549.

Speculation in green coffee prohibited. Feb. 9, 1918, v. 106:550.

New York Coffee and Sugar Exchange's resolution banning circulars encouraging speculation. Feb. 23, 1918, v. 106:771.

New division in Food Administration to pass on coffee. Mar. 2, 1918, v. 106:878.

Regulations for green-coffee dealers. May 4, 1918, v. 106:1852.

Coffee import ruling. June 1, 1918, v. 106:2288.

Coffee-trade committee to cooperate with United States Food Administration. June 15, 1918, v. 106:2505.

Modification of coffee rules urged. June 22, 1918, v. 106:2611.

Coffee price stabilization. Oct. 19, 1918, v. 107:1535.

Coffee futures ordered liquidated at fixed maximum prices. Nov. 9, 1918, v. 107:1787.

Coffee Exchange resumes trading in futures. Dec. 28, 1918, v. 107:2427.

Coffee regulations. Dec. 28, 1918, v. 107:2428.

EGGS AND DAIRY PRODUCTS.

Exchanges agree to abolish speculation in butter and eggs. Nov. 17, 1917, v. 105:1948.

Wholesale prices for butter for New York and Chicago fixed by Food Administration. Feb. 2, 1918, v. 106:446.

Regulations to prevent speculation in butter. June 22, 1918, v. 106:2610.

Margin of profit established on cheese. June 22, 1918, v. 106:2611.

Regulations governing butter. Aug. 3, 1918, v. 107:460.

Cheese put under regulation. Aug. 10, 1918, v. 107:559.

GRAINS.

Exchanges fix maximum prices for wheat futures. May 19, 1917, v. 104:1972.

Corn maximum fixed by Chicago Board of Trade. June 9, 1917, v. 104:2302.

Government control of wheat trade planned. June 30, 1917, v. 104:2604.

Chicago Board of Trade stops trading in July corn. July 7, 1917, v. 105:25.

Chicago Board of Trade takes further steps to control grain speculation. July 14, 1917, v. 105:131.

Wheat prices of various countries. July 14, 1917, v. 105:132.

Chicago Board of Trade empowered to stop trading in grain futures and to fix prices. July 21, 1917, v. 105:236.

Chicago Board of Trade stops trading in September corn. Aug. 4, 1917, v. 105:456.

Chicago Board of Trade to suspend future trading in wheat. Aug. 18, 1917, v. 105:669.

Price for 1917 wheat fixed. Sept. 1, 1917, v. 105:864-66.

Future trading in wheat ends in Chicago. Sept. 1, 1917, v. 105:867.

Government agency assumes control of wheat markets. Sept. 8, 1917, v. 105:959.

Chicago Board of Trade and Government officials agree to limit speculation in grain. Nov. 24, 1917, v. 105:2048.

Chicago Board of Trade decides to retain maximum of \$1.28 on corn futures. Jan. 12, 1918, v. 106:136.

Discontinuance of January trading in corn by Chicago Board of Trade. Feb. 2, 1918, v. 106:446.

The price of wheat—What shall it be? Feb. 23, 1918, v. 106:746.

Bill increasing minimum price of wheat to \$2.50 a bushel favorably reported. Feb. 23, 1918, v. 106:770.

Maximum price for oats fixed at 93 cents by Chicago Board of Trade. Mar. 2, 1918, v. 106:875.

Gore proposal to increase minimum price of wheat. Mar. 23, 1918, v. 106:1189.

Food Administration's new wheat restrictions. Mar. 30, 1918, v. 106:1296.

Disagreement of congressional conferees on wheat price. Aug. 13, 1918, v. 106:1523.

Trading in corn and oats on Chicago Board of Trade. Apr. 13, 1918, v. 106:1523.

House rejects higher wheat price. Apr. 20, 1918, v. 106:1626.

Move toward commandeering wheat. May 11, 1918, v. 106:1950.

Government price regulation. Charles H. Sabin. May 25, 1918, v. 106:2160.

United States Grain Corporation seeks modification of grain regulations. June 15, 1918, v. 106:2705.

President Wilson grants United States Grain Corporation authority to pay higher prices for wheat. June 29, 1918, v. 106:2705.

Proposed regulation of wheat flour milling industry. July 6, 1918, v. 107:33.

Higher wheat prices announced by the Food Administration. July 6, 1918, v. 107:33.

The farmer and the price of wheat. July 13, 1918, v. 107:113.

Senate and House agree on \$2.40 for wheat crop. July 13, 1918, v. 107:136.

Excess profits of millers to be returned to Government in form of flour. July 13, 1918, v. 107:136.

Plans of Food Administration for handling 1918 rice crop. Aug. 3, 1918, v. 107:458.

New flour milling control. Aug. 10, 1918, v. 107:558-9.

Price for 1919 wheat fixed by the President. Sept. 7, 1918, v. 107:945.

Maximum grain prices abolished by Chicago Board of Trade. Oct. 12, 1918, v. 107:1436.

Movement for stabilization of corn prices. Oct. 26, 1918, v. 107:1620.

Wheat price guaranteed to American farmers as compared with that paid by England. Dec. 7, 1918, v. 107:2145-6.

ICE.

Food Administration to prevent profiteering in ice. May 4, 1918, v. 106:1854.

MEAT.

United States Food Administration fixes minimum price for hogs. Nov. 10, 1917, v. 105:1850.

Investigating commission recommends minimum price for hogs. Nov. 17, 1917, v. 105:1946.

Meat packers' profits fixed by Government. Dec. 15, 1917, v. 105:2325.

No increase in meat prices because of temporary scarcity. Feb. 2, 1918, v. 106:447.

Meat restrictions relaxed. Mar. 9, 1918, v. 106:979.

Hoover's recommendations for control of meat industry. Apr. 6, 1918, v. 106:1418.

Packers protest against Federal Trade Commission's report on profiteering. July 6, 1918, v. 107:31.

Minimum hog prices recommended by advisory committee. Oct. 19, 1918, v. 107:1583.

MILK.

The milk situation in New York State—Government not to intervene. Sept. 29, 1917, v. 105:1270.

Federal milk commission allows increase in price for January. Jan. 5, 1918, v. 106:24.

Federal milk commission reduces February prices for milk. Feb. 2, 1918, v. 106:446.

June milk prices fixed by Federal milk commission. June 8, 1918, v. 106:2395.

July prices fixed. July 6, 1918, v. 107:33.

August and September milk prices. Aug. 3, 1918, v. 107:460.

October milk prices—Reduction proposed. Oct. 12, 1918, v. 107:1436.

November prices—Dairymen's demands criticized by Mr. Hoover. Nov. 2, 1918, v. 107:1714.

Further increase in November milk prices—Protest by Mayor Hylan. Nov. 16, 1918, v. 107:1880.

Federal control of milk discontinued. Dec. 28, 1918, v. 107:2428.

ORANGES.

Margin of profit on oranges fixed. Nov. 19, 1918, v. 107:1788.

PRUNES AND RAISINS.

Prices announced by Food Administration. June 22, 1918, v. 106:2611.

SARDINES.

Food Administration fixes price. June 15, 1918, v. 106:2505.

SUGAR.

New York Coffee and Sugar Exchange stops trading in sugar futures. Aug. 18, 1917, v. 105:669.

Conference of representatives of New York Coffee and Sugar Exchange in Washington. Aug. 25, 1917, v. 105:765.

Reduction agreed to by sugar producers. Sept. 1, 1917, v. 105:866.

Sugar refiners agree to import sugar through Food Administration. Sept. 8, 1917, v. 105:960.

President's proclamation calling for licensing of sugar industry. Sept. 22, 1917, v. 105:1163-64.

The sugar situation. Nov. 24, 1917, v. 105:2049.

Basic price for Cuban sugar fixed. Dec. 8, 1917, v. 105: 2230.

Senate committee's investigation of the sugar shortage. Dec. 22, 1917, v. 105: 2418-20.

Mr. Hoover's explanation of sugar shortage. Dec. 29, 1917, v. 105: 2500-2.

Amount to be charged on \$100,000,000 Cuban sugar credit. Mar. 23, 1918, v. 106: 1177.

Further sale of sugar acceptances. June 8, 1918, v. 106: 2383.

Oscar S. Straus to determine sugar cost. June 22, 1918, v. 106: 2611.

New sugar restrictions. June 29, 1918, v. 106: 2706-7.

Increase in basic prices of sugar. June 29, 1918, v. 106: 2707.

New sugar restrictions effective August. Aug. 3, 1918, v. 107: 458.

Increase sought in price for Cuban sugar crop. Aug. 3, 1918, v. 107: 459.

One-hundred-million-dollar sugar syndicate disbanded. Aug. 10, 1918, v. 107: 553.

Food Administration to equalize prices of old and new sugar crops. Sept. 7, 1918, v. 107: 948.

Cane-sugar price fixed by Equalization Board. Sept. 14, 1918, v. 107: 1056.

Cuban-sugar contract. Oct. 26, 1918, v. 107: 1620.

FUELS.

Reduction in bituminous price agreed upon. June 30, 1917, v. 104: 2603-4.

Secretary Baker repudiates bituminous prices agreement. July 7, 1917, v. 105: 20.

Oil for Navy Department—To fix prices later. July 7, 1917, v. 105: 21.

Bituminous-coal prices fixed. Aug. 25, 1917, v. 105: 766.

Anthracite-coal prices fixed. Aug. 25, 1917, v. 105: 767.

Coal committee appeals to operators and miners. Aug. 25, 1917, v. 105: 768.

The endeavor to regulate the coal industry. Oct. 13, 1917, v. 105: 1455.

Maximum prices for by-product coke. Nov. 24, 1917, v. 105: 2053.

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Benumbing effects of Fuel Administrator's order. Jan. 19, 1918, v. 106: 221.

The Fuel Administrator's powers. Jan. 26, 1918, v. 106: 327.

The compensation. Discussion of fuel order. Jan. 26, 1918, v. 106: 328.

Bill authorizing President to fix oil prices. Mar. 30, 1918, v. 106: 1300.

Gasoline and fuel prices announced. June 1, 1918, v. 106: 2295.

M. L. Requa warns hoarding oil producers that Government will not advance price. June 1, 1918, v. 106: 2295.

National petroleum war service committee asked to cooperate in stabilizing crude oil prices. June 29, 1918, v. 106: 2710.

Criticism of Fuel Administration. Editorial. July 13, 1918, v. 107: 104.

Recommendations for stabilizing prices of crude oil. July 20, 1918, v. 107: 241.

A. C. Bedford on what has been accomplished by the oil industry without Government regulation—Stabilizing of prices. July 27, 1918, v. 107: 356-7.

National petroleum committee plans to stabilize price and maintain output. Aug. 17, 1918, v. 107: 655.

Fuel Administration's announcement concerning stabilization of oil prices. Aug. 31, 1918, v. 107: 855-6.

GLYCERIN.

Dynamite glycerin prices. Aug. 24, 1918, v. 107: 761.

HIDES, SKINS, AND LEATHER.

Tanners' council approves leather-import restrictions and fixing of prices. Apr. 27, 1918, v. 106: 1747.

Maximum prices on hides. May 4, 1918, v. 106: 1853.

Tanners agree to leave price fixing to Government. May 4, 1918, v. 106: 1853.

War Industries Board announces prices on pickled sheep pelts. June 15, 1918, v. 106: 2506.

Prices announced for black harness leather. June 29, 1918, v. 106: 2708.

New hide prices announced. July 27, 1918, v. 107: 354.

Sole and belting leather prices. Aug. 24, 1918, v. 107: 757.

IRON AND STEEL.

Steel men confirm reduced prices to United States Government. Apr. 28, 1917, v. 104: 1654.

The Government and steel prices. June 23, 1917, v. 104: 2505.

Steel interests agree to Government price. July 14, 1917, v. 105: 133.

Steel prices approved by President Wilson. Sept. 29, 1917, v. 105: 1263-64.

Steel manufacturers asked to give pledges that Government work receive priority. May 4, 1918, v. 106: 1854.

Changes in steel differentials. Aug. 10, 1918, v. 107: 564.

Iron and steel prices in effect until Dec. 31. Sept. 28, 1918, v. 107: 1252.

New prices and extras in iron bars. Oct. 19, 1918, v. 107: 1539.

Steel committee advises continuance of Government supervision of industry. Nov. 16, 1918, v. 107: 1885.

Steel control and price fixing to end Jan. 1. Judge Gary's views. Dec. 7, 1918, v. 107: 2240.

LEAD.

Government gets supply of lead. Aug. 11, 1917, v. 105: 566.

Lead price fixing unnecessary. Dec. 22, 1917, v. 105: 2412.

Price at which Government's lead products requirements are to be met. Apr. 13, 1918, v. 106: 1525.

LIME.

Lime and acetone taken by Government. Dec. 22, 1917, v. 105: 2412.

LUMBER.

Spruce lumber prices to be paid by the Government. Apr. 27, 1918, v. 106: 1747.

Lumber prices agreed upon. June 15, 1918, v. 106: 2507; June 22, 1918, v. 106: 2615.

Prices for northwestern fir and southern pine. June 29, 1918, v. 106: 2708-9.

Prices for long and short leaf Virginia and Carolina pine lumber. July 13, 1918, v. 107: 137.

Maximum prices for southern pine lumber. July 13, 1918, v. 107: 138.

New England spruce lumber prices. Aug. 3, 1918, v. 107: 461.

Increase in basic price for hemlock. Sept. 7, 1918, v. 107: 949.

Lumber prices continued. Oct. 26, 1918, v. 107: 1621-2.

MANGANESE.

Manganese ore prices announced by War Industries Board. June 1, 1918, v. 106: 2294.

Freight rates on manganese ore. Aug. 24, 1918, v. 107: 759.

NICKEL.

Nickel prices agreed upon. Apr. 6, 1918, v. 106: 1419.

NITRATE.

Nitrate soda purchased in Chile by United States for farmers. Jan. 12, 1918, v. 106: 136.

Plans of nitrate sales to farmers. Jan. 26, 1918, v. 106: 352.

Formation of nitrate board by Allies. Jan. 26, 1918, v. 106: 352.

PAPER.

A principle at issue in regulation of the price of newsprint paper. Feb. 24, 1917, v. 104:701.

Proposal to Federal Trade Commission to fix paper prices. Feb. 24, 1917, v. 104:714.

Government price fixing—The newsprint paper case. Mar. 10, 1917, v. 104:898.

The Canadian newsprint paper manufacturers. Mar. 10, 1917, v. 104:903.

Newsprint paper manufacturers indicted under Sherman anti-trust law. Apr. 28, 1917, v. 104:1667.

Federal Trade Commission and newsprint paper price. Apr. 28, 1917, v. 104:1668-70.

Senate asks Trade Commission to adopt strictures against newsprint manufacturers. July 7, 1917, v. 105:23-4.

The Government's attempt to fix the price of newsprint paper. July 14, 1917, v. 105:114.

Price of paper to Government fixed at 2½ cents per pound. Sept. 8, 1917, v. 105:959-60.

Trade Commission opens to publishers newsprint paper records. Sept. 20, 1917, v. 105:1268.

Trade Commission on paper prices—Renews recommendation for pooling of product. Sept. 29, 1917, v. 105:1268.

The newsprint paper problem again. Oct. 20, 1917, v. 105:1563.

Canadian Government not satisfied with experiment of fixing prices on paper. Nov. 3, 1917, v. 105:1746.

Seeking Government control of the output of newsprint paper. Jan. 19, 1918, v. 106:222.

Newsprint paper prices fixed by Federal Trade Commission. June 22, 1918, v. 106:2613.

PLATINUM.

Platinum commandeered by the Government. Mar. 2, 1918, v. 106:880.

The commandeering of platinum by the Government. Mar. 9, 1918, v. 106:982.

Platinum metals commandeered by the Government. May 18, 1918, v. 106:2074.

RUBBER.

Crude rubber prices fixed by War Trade Board. May 4, 1918, v. 106:1853.

New rubber prices announced. May 18, 1918, v. 106:2073.

SHOES.

Maximum prices on shoes. Oct. 12, 1918, v. 107:1437.

Abandonment of schedule. Dec. 28, 1918, v. 107:2433.

SILVER.

Control of silver by Government. Nov. 17, 1917, v. 105:1938.

Bill providing for melting of silver dollars and fixing price at \$1 an ounce. Apr. 13, 1918, v. 106:1513.

Treasury Department's announcement concerning price fixed for silver. Aug. 24, 1918, v. 107:744.

SULPHUR.

Sulphur control taken over by War Industries Board. July 13, 1918, v. 107:140.

WOOL.

Boston wool supply to be held for the United States. Apr. 7, 1917, v. 104:1341.

New regulations governing wool imports. Jan. 12, 1918, v. 106:138.

Woolen mills called upon to hold looms for Government—Trading in Boston stops. Apr. 13, 1918, v. 106:1528.

Control of Canadian wool exports. May 18, 1918, v. 106:2073.

Other developments in control of wool by Government. May 25, 1918, v. 106:2180.

Likelihood of wool shortage refuted by secretary of National Wool Growers' Association. May 26, 1918, v. 106:2181.

Regulation for handling wool clip. June 8, 1918, v. 106:2396.

Government wool auctions. Dec. 28, 1918, v. 107:2431.

WOOL GREASE.

Prices on wool grease. Nov. 9, 1918, v. 107:1788.

ZINC.

Zinc prices approved by the President. Feb. 16, 1918, v. 106:663.

Zinc prices continued. May 25, 1918, v. 106:2182; June 1, 1918, v. 106:2295; Aug. 31, 1918, v. 107:858.

ECONOMIC WORLD.

National Government and regulation. Mar. 10, 1917, N. S. v. 13:327-328.

Economic difficulties in the way of successful government price fixing. July 21, 1917, N. S. v. 14:78-79.

Government's problem of fixing prices. Aug. 11, 1917, N. S. v. 14:183-184.

Concatenation of problems produced by governmental price fixing. Sept. 22, 1917, N. S. v. 14:399-400.

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Both governmental and cooperative price fixing to cease on Jan. 1. Jan. 4, 1919, N. S. v. 17:13.

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14. Prices of vegetables and truck.
15. Prices of edible vegetable oils.
16. Prices of fruits, nuts, and wine.
17. Prices of spices and condiments.
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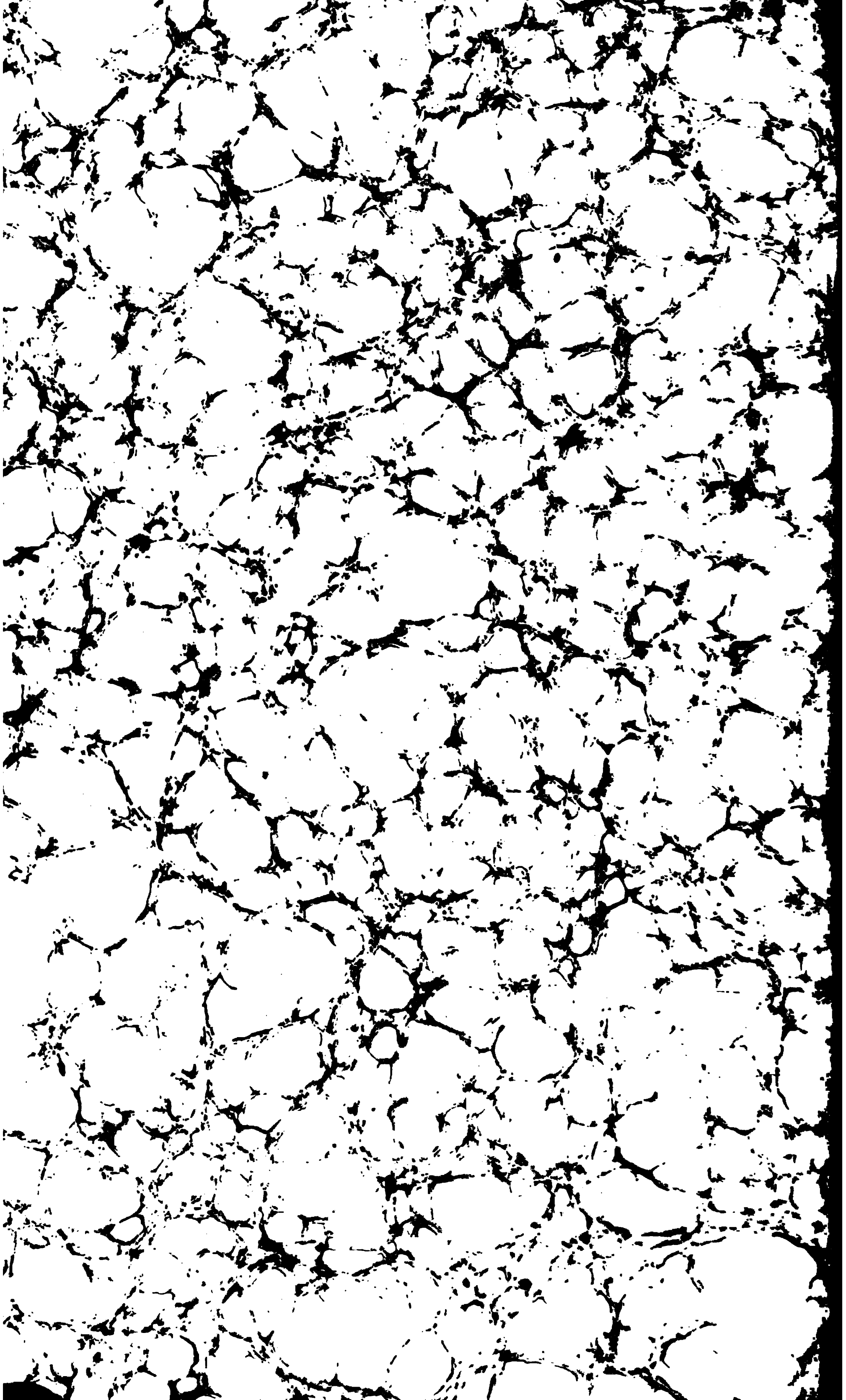
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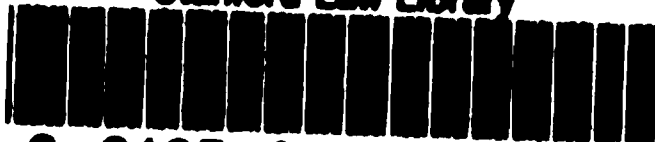
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